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Table of Contents

Table of Indicators

Introduction

Québec's Education System: An Overview

1 Financial Resources Allocated to Education

2 Activities

3 Results–Educational Outcomes

4 Results–Evaluation of Learning

5 Results–Graduation

6 The Labour Market

Statistical Appendix

Tables on enrollment, personnel, diplomas and schooling rates

Table of Indicators

	Financial Resources Allocated to Education	Activities
Education System and Social Context	1.1 Government Spending on Education in Québec 1.2 Total Educational Spending in Relation to GDP 1.3 Total Educational Spending Per Capita 1.4 Total Educational Spending per Student in Relation to Per Capita GDP 1.5 Cost of Educating Graduates	2.1 School Life Expectancy 2.2 Enrollment in Preschool Education
Elementary and Secondary Education	1.6 Total Spending on Elementary and Secondary Education in Relation to GDP 1.7 School Board Spending in Current and Constant Dollars 1.8 School Board Spending per Student 1.9 Student-Teacher Ratio in School Boards 1.10 Average Salary of Teachers in School Boards	2.3 Enrollment in Secondary IV and V, General Education–Youth Sector 2.4 Enrollment in Secondary Vocational Education–Youth and Adult Sectors 2.5 Enrollment in Secondary General Education–Adult Sector 2.6 Dropping Out of Secondary School 2.7 Grade Repetition in Elementary School and in Secondary General Education–Youth Sector
College	1.11 CEGEP Spending 1.12 Student-Teacher Ratio, Average Teacher Salary and Cost of Teachers per Student in CEGEPs	2.8 College Enrollment–Regular Education 2.9 Immediate Transition From College to University
University	1.13 Total University Spending in Relation to GDP 1.14 University Spending per Student 1.15 Average Salary of University Research Professors 1.16 Student Financial Assistance and Tuition Fees 1.17 Funded and Sponsored Research in Universities	2.10 University Enrollment 2.11 Training of Researchers

Table of Indicators (cont.)

	Results	
	Educational Outcomes	**Evaluation of Learning**
Education System and Social Context		
Elementary and Secondary Education	3.1 Success in Secondary Cycle Two of General Education–Adult Sector 3.2 Success in Secondary Vocational Education	4.1 Secondary School Examination Results, by Several Variables–Youth Sector 4.2 Regional Disparities in Secondary School Examination Results–Youth Sector 4.3 Secondary V French, Language of Instruction, Examination–Youth Sector 4.4 Mathematics Achievement of 13-Year-Olds
College	3.3 Success in Pre-University Programs in Regular College Education 3.4 Success in Technical Programs in Regular College Education 3.5 Duration of Studies in Regular College Education	4.5 Ministerial Examination of College French
University	3.6 Success and Duration of Studies in Bachelor's Programs 3.7 Success and Duration of Studies in Master's Programs 3.8 Success and Duration of Studies in Doctoral Programs	

Table of Indicators (cont.)

	Results	The Labour Market
	Graduation	
Education System and Social Context	5.1 Highest Diploma or Degree Earned	6.1 Employment Trends by Level of Education 6.2 Labour Force Attachment by Level of Education 6.3 Labour Market Integration of Graduates
Elementary and Secondary Education	5.2 Graduation From Secondary School–Youth and Adult Sectors 5.3 Graduation From Secondary School: Regional Disparities–Youth and Adult Sectors 5.4 Graduation From Secondary Vocational Education–Youth and Adult Sectors 5.5 Graduation From Secondary School in Québec and OECD Countries, 2000	6.4 Labour Market Integration of Secondary Vocational Education Graduates
College	5.6 Graduation From College	6.5 Labour Market Integration of College Graduates 6.6 Employers' Opinions of Graduates of Technical Education Programs
University	5.7 Graduation From University 5.8 University Degrees by Field of Study 5.9 Graduation From University in Québec and OECD Countries, 2000	

Introduction

This edition of the *Education Indicators* deals with all levels of education, from kindergarten to university. Some indicators cover the education system as a whole, whereas others focus on a specific level. This year, the regular updates have been made as well as some changes to the sections on government spending on education, the performance of students on Canadian examinations as part of the School Achievement Indicators Program (SAIP), and employers' opinions of college graduates.

The purpose of publishing indicators is to ensure accountability by providing specific information on the resources allocated to education, the various activities pursued by the education system and the results obtained. The indicators are presented under a series of headings classifying recent and historical data that helps trace these developments over time. The 2003 edition contains 56 sections: 55 of these have been updated, 53 from the 2002 edition and 2 from previous editions, while one is altogether new.

The development of education indicators in Québec is part of a larger movement. The Council of Ministers of Education, Canada (CMEC) has undertaken projects to develop indicators for Canada's provinces; the Organisation for Economic Co-operation and Development (OECD) has done the same for its member countries, and the United Nations Educational, Scientific and Cultural Organization (UNESCO) has also published a series of indicators on education throughout the world. Québec has been an active participant in this worldwide movement, having published the first edition of the *Education Indicators* in 1986.

Examination of the indicators in this publication reveals a number of trends and developments that characterize Québec's education system. Some are explained briefly below. Additional information on these topics and others can be found further on in this booklet.

Financial Resources Allocated to Education

In 2001-2002, Québec's educational spending, including operating expenses, capital expenses of educational institutions and the administrative expenses of the Ministère de l'Éducation, was estimated at $17 billion, or 7.4% of the gross domestic product (GDP). The share of the GDP allocated to education in the rest of Canada was estimated

at 6.3% and in the United States, at 7.2%. In 2002-2003, 25.8% of the Québec government's program spending was allocated to education.

Total spending amounted to $2 291 per capita and was similar to that of the rest of Canada. In 2001-2002, the breakdown of total spending by level of education was as follows: elementary and secondary education (school boards and subsidized private schools), 53%; college education (CEGEPs and subsidized private colleges), 12%; and university education, 23%. In addition, other spending, mainly for education funded by Human Resources Development Canada or by Emploi Québec, accounted for 12% of the total.

In 2001-2002, operating expenses in Québec school boards were estimated at $7.8 billion, for a per-student average of $7 125. Per-student spending in Québec school boards was 3.7% higher than in the rest of Canada; however, the student-teacher ratio was 14.6 in Québec compared with 16.2 in the rest of Canada, which was offset by a relatively lower salary for teachers in Québec, that is, $51 262 compared with $57 570 in the rest of Canada.

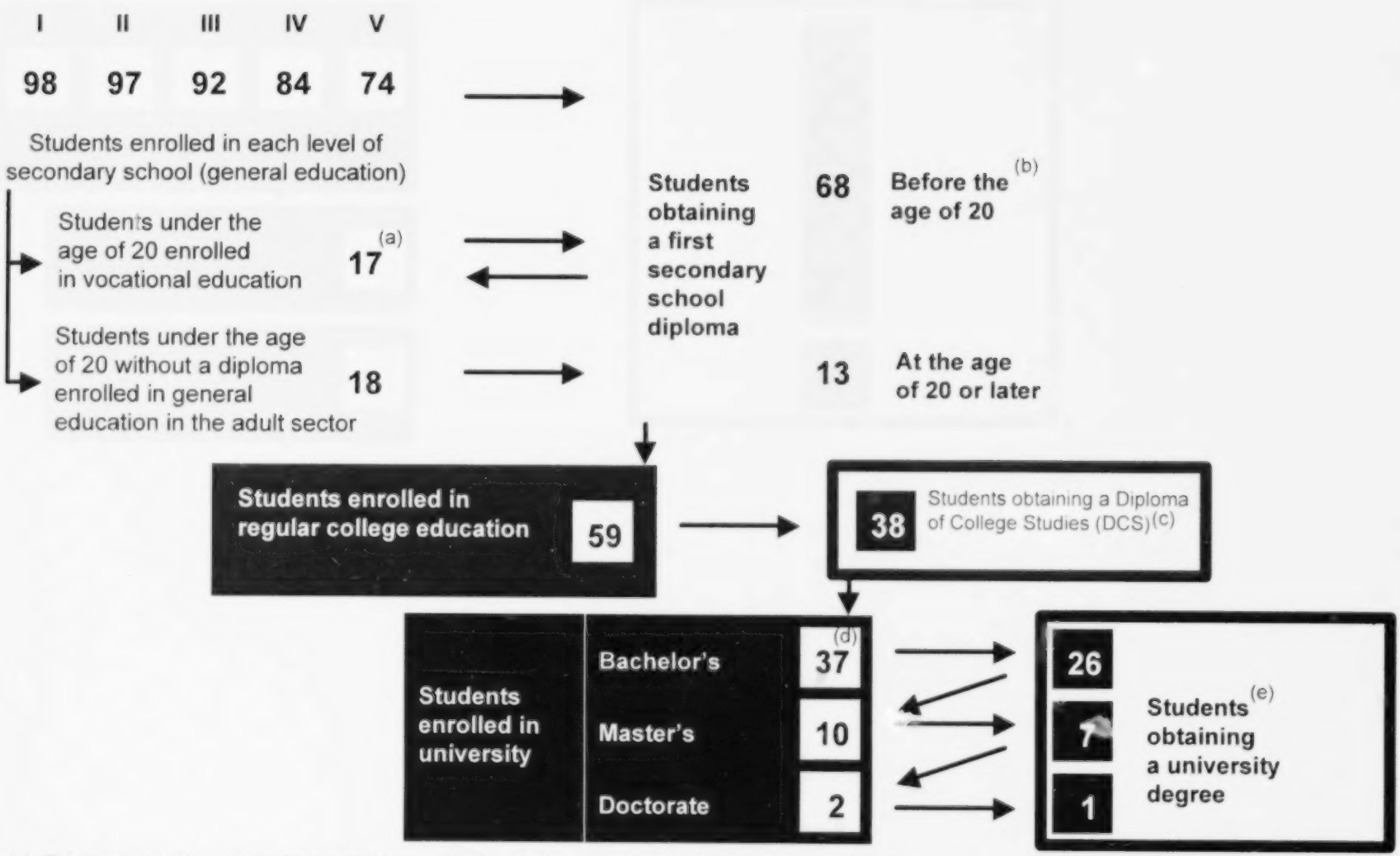
Per-student operating expenses in CEGEPs were estimated at $8 057 in 2001-2002, 54% ($4 339) of which went to teachers. In 2001-2002, university per-student operating and capital expenses, not including funded research, were $11 916, the same as the average for the rest of Canada ($11 943). Overall university spending, however, represented a higher percentage of the GDP in Québec (1.69%) than in the rest of Canada (1.42%) precisely because of Québec's lower collective wealth (defined by the per capita GDP). An amount of $874.5 million was allocated to university research in 2000-2001. The cost of university professors per student was $4 806 in 2000-2001.

In 2001-2002, 127 768 persons benefited from Québec's Student Financial Assistance Program. A total of $338.6 million was granted in the form of loans and $254.0 million, in bursaries. Tuition fees averaged $1 851 in Québec for full-time undergraduate studies compared with $4 634 in Ontario.

Student Retention from Elementary School to University

Student retention in Québec's education system for 2001-2002 is illustrated on the opposite page. The diagram represents the proportions of a cohort of young people who could expect to enroll and to obtain a diploma or degree in each level of education. The diagram shows that, in a generation of 100 persons, 98 could be expected to reach the secondary level and 81 to obtain a first secondary school diploma, 38 to obtain a Diploma of College Studies (DCS),

Student Retention of 100 Quebeckers in the Education System, Based on Findings for 2001-2002



(a) This figure includes 10 general education graduates likely to obtain another diploma in vocational education.
(b) All diplomas earned in the youth sector are included, regardless of the age of the graduates.
(c) The most recent year for which data is available is 2000-2001.
(d) Students who enroll in university are not limited to those who hold a DCS.
(e) The most recent year for which data is available is 2001.

26 to earn a bachelor's degree, 7 to be awarded a master's degree and 1 to obtain a doctorate. Of the 81 students to obtain a secondary school diploma, 26 would do so in vocational education. However, the educational playing field was far from level for the sexes in 2001-2002: many more male students than female students (25% compared with 12%) could be expected to leave their studies before earning a diploma or degree. At the other extreme, in 2001, 31% of women would obtain at least a bachelor's degree, compared with only 21% of men.

Objectives for the educational success of a greater number of Quebeckers have been set for the year 2010: to have 85% of the students in a generation earn a secondary school diploma before the age of 20; 60%, a DCS; and 30%, a bachelor's degree. Women have already attained the objective set for earning a bachelor's degree.

Children who began elementary school in 2001-2002 can expect to be in school for 15.4 years (assuming that the success rates and retention rates prevailing in the education system in 2001-2002 do not change). Secondary school graduates will have been in school for 11.2 years, at an estimated cost of $91 488 in 2000-2001; those obtaining a bachelor's degree will have studied for 17.2 years, at an estimated total cost of $180 161.

Staying in School and Obtaining a Diploma

The dropout issue is a major concern among educators. Numerous approaches have shed light on this phenomenon. Educational success, defined here as obtaining a diploma, is measured differently for each level and sector of education. In this regard, the proportion of 19-year-olds who left school without a secondary school diploma was 19% at the beginning of 2001-2002.

The proportion of students in other education sectors who obtained diplomas or degrees and the proportion who left school either temporarily or permanently were determined by observing the number of students who leave school each year. Thus, of the students in Secondary Cycle Two in the adult sector who quit their studies before the age of 20, 54% did so with a diploma, while 46% left school for at least two years. In secondary vocational education, of 100 students of all ages who were enrolled in programs leading to a Diploma of Vocational Studies (DVS) (known as the Secondary School Vocational Diploma [SSVD] prior to 1998) and who left secondary school, 67 did so with a diploma. At the college level, 69% of students in pre-university programs leading to a DCS obtained a diploma; in technical education, 57% of students obtained a DCS. At the university level, 67% of students leaving bachelor's programs did so with a degree. Of the students enrolled in master's and doctorate programs, 69% and 53%, respectively, earned their degree.

Evaluation of Learning

In the subjects for which uniform examinations were administered for the certification of studies by the Ministère de l'Éducation in June 2002, students in Secondary IV and V obtained an average mark of 73.4% and had a success rate of 85.1%. The male students' average was 72.4% and the female students', 74.2%. Students obtained an average final mark of 71.3% on the examination in Secondary V French, language of instruction; and 89.6% passed. At the college level, 84.3% passed the ministerial examination of college French, language of instruction.

On the mathematics examinations held in the spring of 2001 as part of the School Achievement Indicators Program of the Council of Ministers of Education, Canada, 13-year-old students in Québec obtained slightly better results than those obtained in Canada as a whole.

What Becomes of Graduates?

When they finish school, graduates from secondary school, college and university have to make choices. Some decide to continue their education, while others set their sights on the labour market. In 2000-2001, at the end of their college studies, 77.4% of pre-university program graduates under the age of 25 went on to university the following year, compared with 20.2% of graduates from technical programs.

The unemployment rate in March 2002 was 12.3% for students who had graduated in 1999-2000 with a DVS, 5.4% for students who had graduated from a college technical program and 10.5% for pre-university program graduates. The unemployment rate in 1999 was 4.0% for graduates with a bachelor's degree, 3.7% for master's degree graduates and 6.2% for those with a doctorate.

Since 1990, the profile of the work force in Québec has changed significantly. In 2001, of those who were employed, 770 000 (or 49%) more had a DVS, a DCS or a university degree than in 1990. During the same period, the number of employed people who had not gone beyond the SSD in general education dropped by 319 000 (or 20%).

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Readers seeking a more in-depth analysis or an up-to-date picture of the situation should consult the individual sections in the pages that follow. The Ministère de l'Éducation and the Conseil supérieur de l'éducation also produce and publish specialized studies on these topics. Finally, general information on the education system is available in the following publications:

- *Basic Statistics on Education*
- *Annual management report of the Ministère de l'Éducation*
- *Annual Report on the State and Needs of Education, published by the Conseil supérieur de l'éducation*
- *Strategic Plan of the Ministère de l'Éducation*

This information is also available on the Web site of the Ministère de l'Éducation at <http://www.meq.gouv.qc.ca>.

Québec's Education System: An Overview

Québec's education system offers a wide range of educational programs and services from kindergarten to university.

Elementary and Secondary Education

Elementary school normally lasts six years; secondary school, five. Children are admitted to the first year of elementary school in the school year in which they will have turned 6 years of age by October 1. Kindergarten is not compulsory, but, as of the fall of 1997, almost all 5-year-olds attend full-time. School attendance is compulsory until the year in which students turn 16 years of age, which normally corresponds to Secondary IV.

Elementary education is offered in French, English or a Native language, and secondary education, in French or English. Students deemed eligible to study in English are chiefly those whose father or mother attended English elementary school in Canada. Public elementary and secondary education is provided by school boards. The school boards are managed by school commissioners, who are elected by residents in the territory under the school board's jurisdiction. The school boards hire the staff they need to provide educational services. In 2001-2002, the Québec government funded 78% of school board operating expenses, while local taxes accounted for 14% of school board revenues, and other sources provided the remaining 8%.

In July 1998, the number of school boards was reduced to 72, and they were organized along linguistic lines, except for three with special status. There are 60 French school boards and 9 English school boards, with enrollments ranging from 850 to 75 500, for a median size of approximately 9 250 students. The three special-status school boards serve primarily Native students in the Côte-Nord and Nord-du-Québec regions; they are the Cree School Board, the Kativik School Board and the Commission scolaire du Littoral.

Elementary and secondary education is also provided by private institutions, some of which are subsidized by the Ministère de l'Éducation. The private school system accounts for 5.0% of elementary students and 17.4% of secondary students in the youth sector. About half of the operating expenses of subsidized private institutions are funded by the Québec government. Elementary and secondary education is also offered by some public institutions that are not part

of the school board system but that fall under Québec or federal government jurisdiction; these institutions account for 0.3% of students.

Secondary school diplomas are awarded by the Minister of Education to students who fulfill the certification requirements set by the Minister. A Secondary School Diploma (SSD) generally leads to admission to college. A Diploma of Vocational Studies (DVS) (known as the Secondary School Vocational Diploma [SSVD] prior to 1998) generally leads to the labour market, but also allows admission to college. The harmonization of educational services offered in the youth sector and the adult sector is a feature of Québec's education system. Adult education leads to secondary school diplomas that are the same as or equivalent to those offered in the youth sector.

College Education

Students may enroll in college programs leading to a Diploma of College Studies (DCS) or in short technical programs leading to an Attestation of College Studies (ACS). College education theoretically consists of a two-year program for students enrolled in pre-university education or a three-year program for those in technical education; technical programs aim primarily at entry into the labour market, but also allow admission to certain disciplines in university.

Students may pursue their college studies in the language of instruction of their choice. Public college education is provided by CEGEPs (a French acronym that stands for general and technical college). CEGEPs are administered by boards composed of representatives from different interest groups, including members of the public, parents, students, staff members and college administrators. In 2001-2002, the Québec government funded 86% of CEGEP operating expenses. Private educational institutions served 11% of college students, and 55% of their expenses were funded by the government. College education is also available at a few institutions associated with ministries other than the Ministère de l'Éducation and by the Macdonald Campus of McGill University.

A DCS is awarded to a student by the Minister of Education following the recommendation of the institution attended. For shorter programs, other types of certification are awarded: the Certificat d'études collégiales (CEC–certificate of college studies), the Diplôme de perfectionnement de l'enseignement collégial (DPEC–diploma of advanced college studies) and the ACS. These are issued directly by the college. CECs and DPECs have been virtually phased out, as students stopped being admitted to programs leading to these types of certification in 1994.

University Education

Québec has English and French universities; students are free to attend a university of their choice. University education is divided into three levels of studies. The first leads to a bachelor's degree (generally after three years or, less frequently, four years in certain programs), the second to a master's degree, and the third to a doctoral degree. Universities also award certificates, diplomas and other forms of attestation to certify the successful completion of short programs. In 2001-2002, 54% of university expenses were subsidized by the Québec government.

Ministère de l'Éducation

The Ministère de l'Éducation fulfills different functions for the various levels of education. For elementary, secondary and college education, the Ministère develops programs and determines objectives and often content. In terms of labour relations, it negotiates and signs provincial agreements. In terms of financing, it establishes a standard framework and provides the largest share of resources. At the university level, it promotes the advancement of teaching and research by providing universities with the resources required for operation and development while respecting their autonomy and fostering collaboration among the various partners.

The Education Reform and the Strategic Plan of the Ministère de l'Éducation

In the fall of 1996, following the Estates General on Education, the Ministère de l'Éducation announced the main guidelines for the reform of the education system. Seven major lines of action were defined:

- Provide services for young children, in particular, by implementing full-time kindergarten.
- Teach the essential subjects throughout elementary and secondary school.
- Give more autonomy to schools.
- Support Montréal schools, given the particular challenges they are facing.
- Intensify the reform of vocational and technical education.
- Consolidate and rationalize postsecondary education.
- Provide better access to continuing education.

Concrete changes have already taken place: in particular, kindergarten was made full-time for 5-year-olds in the fall of 1997. At the secondary level, the diversification of vocational education options has also been undertaken and will provide access to programs leading to a DVS after Secondary III and the implementation of programs leading to an Attestation of Vocational Education (AVE) that will prepare students who have completed Secondary II to practise a semiskilled occupation.

In addition, as part of the Ministère de l'Éducation's 2000-2003 strategic plan, which provides for a reinvestment in education, educational institutions at the elementary, secondary and college level were required to develop and implement success plans, and universities, performance contracts, starting in 2000. These plans must include targets for educational success in terms of measurable results and the concrete means to achieve these results.

1.1 Government Spending on Education in Québec

Spending on education in Québec was estimated at $11.1 billion in 2002-2003, accounting for 25.8% of government program spending. Since the beginning of the 1990s, the portion of government program spending allocated to education has varied but, in general, it has been in decline.

Government spending on education in Québec was estimated at $11.1 billion in 2002-2003, $1.6 billion more than in 1998-1999.

Québec government program spending was slashed from $36.3 billion to $35.6 billion between 1992-1993 and 1997-1998 in an attempt to reduce the deficit. By 1998-1999, however, it was once again on the rise, reaching $38.0 billion that year and $43.2 billion in 2002-2003.

Table 1.1 presents Québec government program spending in the four major sectors: education; health and social services; employment and social solidarity; and family, childhood and status of women. Spending on other portfolios and programs are grouped together under "Other portfolios." The table makes it possible to compare changes in the portion of government spending allocated to education with those in the other major sectors.

A comparison of program spending in the major sectors during the period considered reveals significant changes in the portion of spending allocated to each. Thus, there has been an increase in the relative portion of spending in two of the sectors; the portion of spending allocated to health and social services grew from 35.0% to 40.4% between 1992-1993 and 2002-2003, while the portion allocated to family, childhood and status of women increased from 2.7% to 4.3% during the same period.

The portion of spending allocated to employment and social solidarity increased until the mid-1990s, then began a downward trend attributable to an upswing in economic conditions (fewer households benefiting from social assistance); in 2002-2003, the portion of spending allocated to this sector was lower (9.2%) than in 1992-1993 (9.9%).

The education sector and the other portfolios also saw a decrease in the portion of program spending allocated to them. Between 1992 and 1998, the portion of government program spending allocated to education dropped from 28.6% to 25.2%, which can be explained by budget cuts and strict cost-cutting measures in school boards. Also, a decrease in student enrollments meant that financial needs remained relatively stable.

The portion of program spending allocated to education varied between 1998 and 2002, and was 25.8% in 2002-2003. While this proportion is barely higher than that observed in 1998-1999 (25.2%), it is important to note that the actual amount of financial resources allocated to education in 2002-2003 was $11.1 billion, or $1.6 billion more than in 1998-1999 (a 16% increase). That the portion of program spending allocated to education rose only slightly during this period can be explained primarily by the fact that the health and social services sector saw a greater increase in spending between 1997-1998 and 2002-2003 than did education ($4.5 billion, or 35%).

The $1.6-billion increase in educational spending since 1998 can be partly explained by the amounts reinvested in education following the Youth Summit in February 2000, the agreement concluded in April 2000 between the Québec government and the unions regarding a new salary structure for teachers employed by school boards (as part of pay equity), and support measures for educational institutions.

Table 1.1

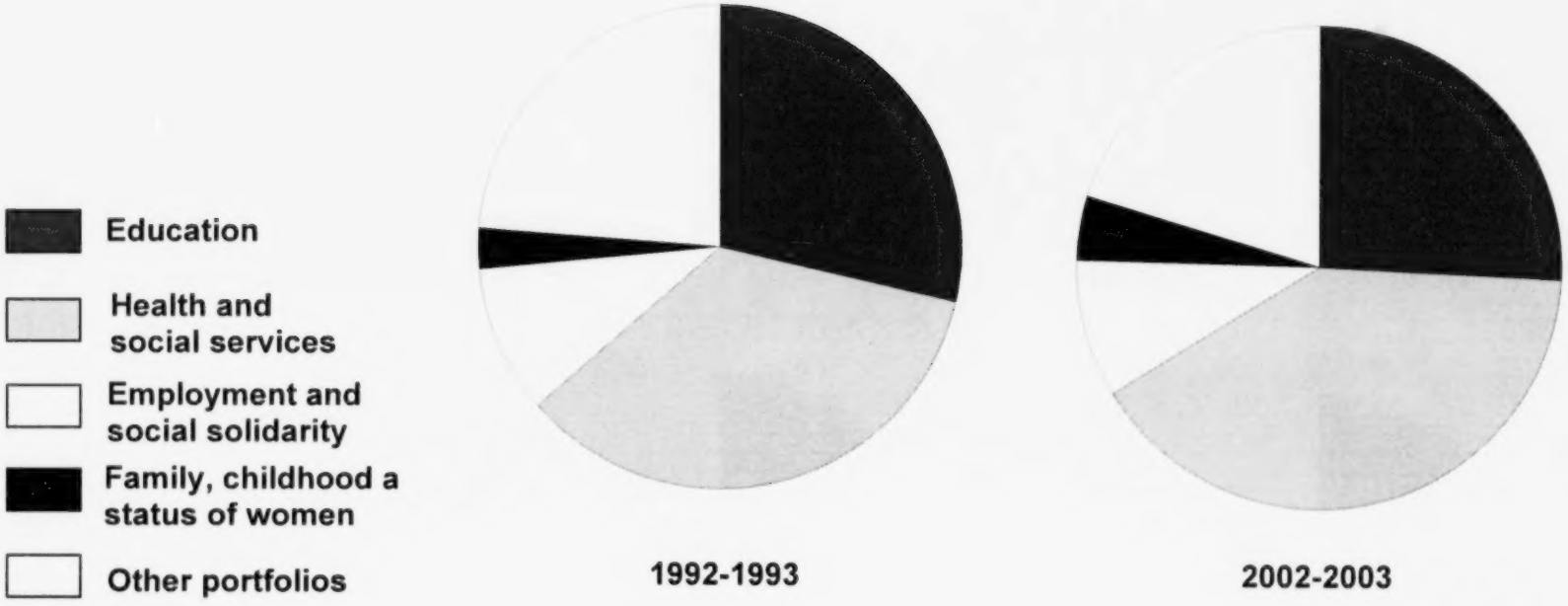
Québec government program spending, by sector[1] (%)

	1992-1993	1994-1995	1996-1997	1998-1999	2000-2001	2002-2003[e]
Education	**28.6**	**28.3**	**28.4**	**25.2**	**24.8**	**25.8**
Health and social services	35.0	35.3	36.4	38.4	39.4	40.4
Employment and social solidarity	9.9	10.8	11.2	10.9	10.0	9.2
Family, childhood and status of women	2.7	2.9	3.2	4.0	3.8	4.3
Other portfolios	23.8	22.7	20.8	21.5	22.0	20.3
Program spending	100.0	100.0	100.0	100.0	100.0	100.0

e: Estimates
1. Data related to program spending is presented according to the 2002-2003 budget structure.

Graph 1.1

Distribution of Québec government spending, by sector (%)



1.2 Total Educational Spending in Relation to GDP

In 2001-2002, Québec allocated 7.4% of its gross domestic product (GDP) to education,[1] compared with the Atlantic Provinces at 8.2%, Ontario at 5.8%, and Western Canada at 6.5%. The United States spent 7.2% of its GDP on education. When this indicator is considered, it is evident that Québec educational spending remains higher than the average for the other provinces and the United States.

In 2001-2002, the share of GDP allocated to education was higher in Québec than in the rest of Canada as a whole, and in the United States. However, compared with the situation that prevailed in the early 1980s, the gap has narrowed.

Between 1981 and 1989, the share of GDP earmarked for education in Québec dropped considerably (from 9.3% to 7.3%), while it increased slightly in the rest of Canada (from 6.5% to 6.7%), and showed a slightly higher rise in the United States (from 6.3% to 7.0%). The fact that Québec has moved closer to the North American average can largely be explained by the more restrictive measures adopted by the Québec government to control spending during that period.

Between 1989 and 1993, a period of economic recession, the share of GDP allocated to education rose in all regions of Canada and in the United States. In 1993-1994, Québec spent 8.6% of its GDP on education, the rest of Canada spent 7.6% and the United States spent 7.2%.

Between 1993 and 2001, the share of GDP spent on education decreased in all regions of Canada, in particular because of budget cuts. In Québec it dropped from 8.6% to 7.4%, and in the rest of Canada, from 7.6% to 6.3%. In the United States, it remained relatively stable and was estimated at 7.2% in 2001-2002.

If the share of GDP allocated to education in Québec is compared with that allocated by the member countries of the Organisation for Economic Co-operation and Development (OECD) in 1999, Québec ranks among the countries with the highest educational spending. This is primarily because teaching costs are relatively higher in Québec than the

1. In 2001-2002, Québec spent $17.0 billion of its $228.5-billion GDP on education. The concept of total spending used in this section is defined at the bottom of Table 1.2.

OECD average. The fact that postsecondary education is more developed in Québec than in the OECD countries also helps explain Québec's higher level of educational spending.[2]

To explain why Québec invested a greater share of its GDP in education than the rest of Canada in 2001-2002, the following four factors can be considered: per-student spending; collective wealth (defined by the per capita GDP); the school attendance rate (the ratio of total school enrollment to the population between 5 and 24 years old); and the demographic factor (the ratio of the 5-24 age group to the total population). Per-student spending in Québec, which is comparable to the average for the rest of Canada, did not contribute significantly to the gap between the share of GDP allocated to education in Québec and that allocated in the rest of Canada. The slightly higher school attendance rate in Québec helps explain why Québec invests a greater share of its GDP in education than the rest of Canada, but it is partially offset by the demographic factor (older population in Québec). The most important factor underlying the gap between Québec and the rest of Canada is Québec's lower per capita GDP. It is therefore Québec's lesser collective wealth that primarily explains why it invests relatively more in education.

There is, however, an important point to be made about the similarity between per-student spending in Québec and in the rest of Canada; it concerns differences in the cost of living. Since the cost of living is lower in Québec (about 15% lower than in Ontario), although it spent the same amount per student as the rest of Canada, Québec spent more real funds on its students.

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2. The most recent year for which data is available on the share of GDP allocated to education for the OECD countries is 1999. For more information regarding comparisons with member countries of the OECD, see Marius Demers, "Educational Spending Relative to GDP in 1997: A Comparison of Québec and the OECD Countries," *Education Statistics Bulletin* 20, (Québec: Ministère de l'Éducation, Direction des statistiques et des études quantitatives, November 2000). This document is available on the Internet at <http://www.meq.gouv.qc.ca>.

Table 1.2

Total educational spending[1] in relation to GDP: Québec, other regions of Canada, and the United States (%)

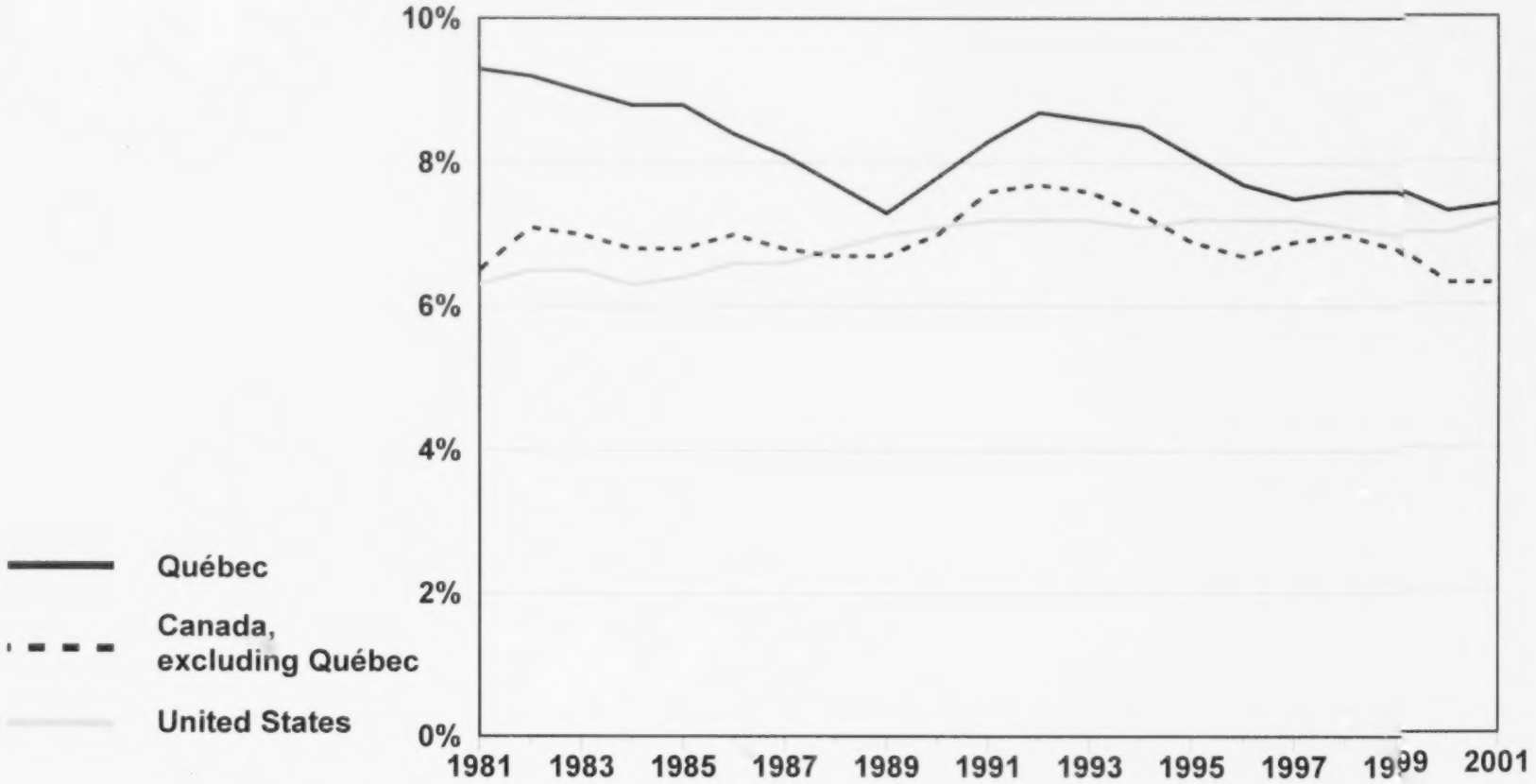
	1981-1982	1989-1990	1993-1994	1999-2000[e]	2000-2001[e]	2001-2002[e]
Québec	**9.3**	**7.3**	**8.6**	**7.6**	**7.3**	**7.4**
Canada, excluding Québec	**6.5**	**6.7**	**7.6**	**6.8**	**6.3**	**6.3**
Atlantic Provinces	10.5	9.3	9.7	8.7	8.2	8.2
Ontario	6.5	6.2	7.4	6.3	5.8	5.8
Western Canada	5.7	6.6	7.1	6.9	6.4	6.5
Canada	**7.1**	**6.8**	**7.8**	**6.9**	**6.5**	**6.6**
United States	**6.3**	**7.0**	**7.2**	**7.0**	**7.0**	**7.2**

e: Estimates

1. Total educational spending includes the operating and capital expenses of all levels of public and private education, the Ministère's administrative expenses, government contributions to employee pension plans, the cost of student financial assistance and other education expenses (as defined by Statistics Canada).

Graph 1.2

Total educational spending in relation to the GDP: Québec, Canada excluding Québec, and the United States (%)



1.3 Total Educational Spending Per Capita

In 2001-2002, total educational spending per capita in Québec was similar to the average for the rest of Canada.

In 2001-2002, total educational spending per capita[1] was estimated at $2 291 in Québec, higher than in the Atlantic Provinces ($2 173) and Ontario ($2 161), but lower than in Western Canada ($2 446). Graph 1.3 shows the relative change in total educational spending per capita for these regions between 1981 and 2001.

Table 1.3a shows the data on total spending per capita by level of education in 2001-2002.[2] These figures indicate the distribution of educational spending among the levels of education for the regions in question. The differences in total per capita spending observed between regions for a given level of education are explained in part by the organizational differences between the education systems. Thus, the fact that total per capita spending at the elementary and secondary levels is lower in Québec than in the rest of Canada (with the exception of the Atlantic Provinces) is explained in part by the shorter duration of studies in Québec (11 years in Québec, and normally 12 years in the rest of Canada). Conversely, total spending per capita at the college level is higher in Québec than in the rest of Canada, because of the unique characteristics of our college network (including the mandatory two years of college before entering university).[3]

Table 1.3b shows data on the direct sources of funds for financing total educational spending. These figures indicate that in Québec, provincial subsidies make up a large part of the financing for education (69.1%). This percentage is higher than in the Atlantic Provinces (67.5%), Ontario (50.1%) and Western Canada (54.8%).

---

1. Total educational spending includes the operating and capital expenses of all levels of public and private education, the Ministère's administrative expenses, government contributions to employee pension plans, the cost of student financial assistance and other education expenses (as defined by Statistics Canada).
2. The category "Other" in Table 1.3a includes education financed by Human Resources Development Canada, federal spending on language courses, vocational education offered in federal and provincial correctional institutions, various federal and provincial training programs (for example, those offered by Emploi Québec) and expenses of private trade schools, art schools, music schools, etc. (as defined by Statistics Canada).
3. Regarding the organizational differences at the college level, see Section 1.4.

In the other provinces, financing sources other than the government play a larger role for one or more of the following reasons: local funding is more significant, tuition fees are higher, or the educational institutions in the other regions are in a better position to obtain other sources of funding.[4]

In 2002-2003, university students in Québec paid tuition fees that were 40% ($1 851) of the amount charged in Ontario ($4 634).[5] Furthermore, unlike in Québec, students in the other provinces enrolled at a level equivalent to college may be required to pay tuition fees. Thus, on average in 2001-2002, students enrolled full-time in programs leading to a diploma or certificate in a technical college in Ontario were required to pay $1 752 in tuition fees, about $200 in other compulsory fees and between $800 and $1 000 for textbooks and supplies.

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4. It must be noted, however, that there are comparatively more private schools in Québec than in the rest of Canada, and that tuition fees paid to the schools are included in the other sources of funding.
5. See Section 1.16.

Table 1.3a

Total educational spending per capita: Québec and the other regions of Canada, 2001-2002[e] ($)

	Elementary and secondary	College[1]	University	Other[2]	Total
Québec	**1 219**	**286**	**519**	**267**	**2 291**
Canada, excluding Québec	**1 349**	**138**	**512**	**293**	**2 292**
Atlantic Provinces	1 115	100	579	379	2 173
Ontario	1 344	130	482	205	2 161
Western Canada	1 393	152	528	373	2 446
Canada	**1 318**	**173**	**514**	**287**	**2 292**

Table 1.3b

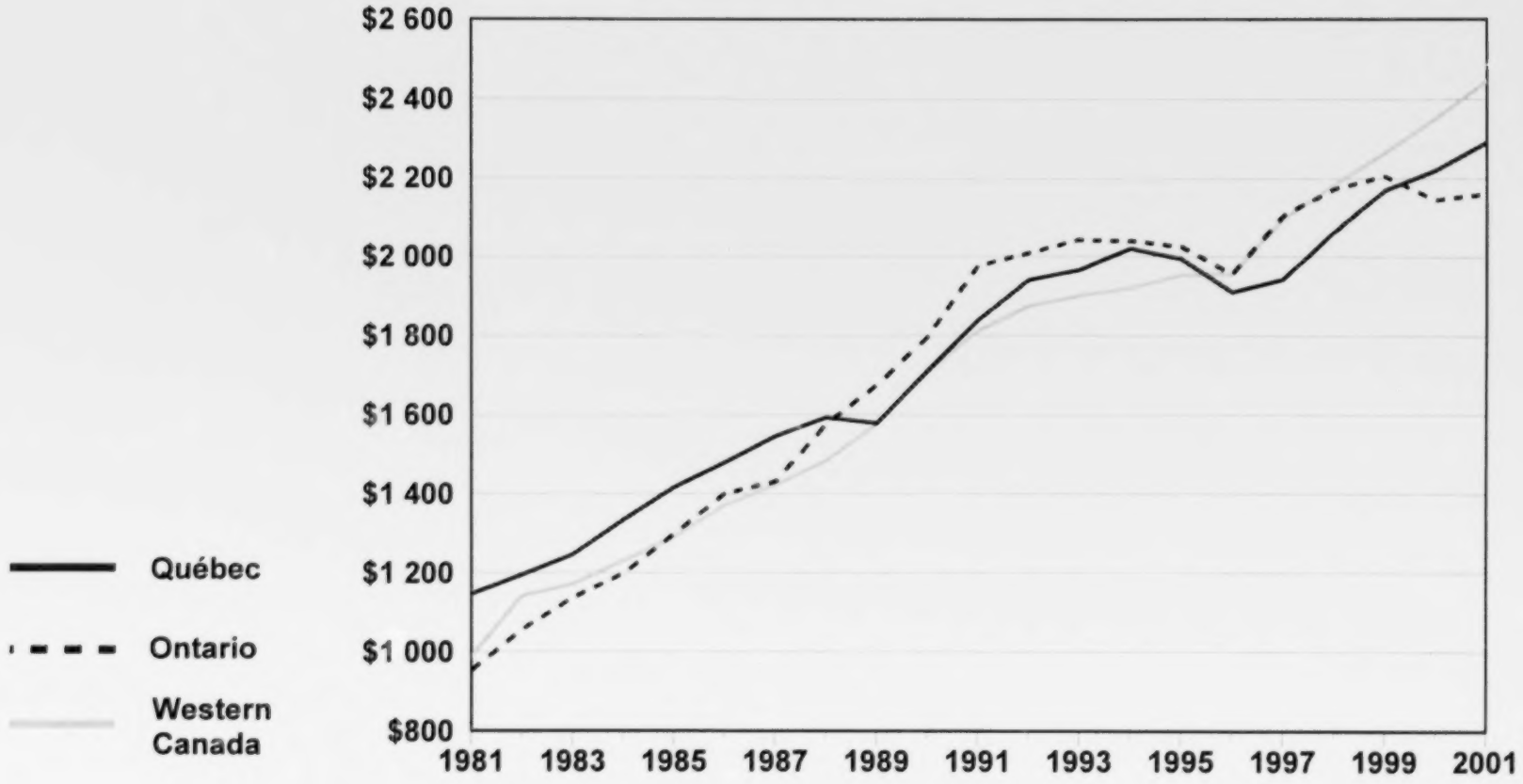
Direct sources of funds for total educational spending: Québec and the other regions of Canada, 2001-2002[e] (%)

	Provincial government	Federal government	Local government	Other sources	Total
Québec	**69.1**	**8.5**	**6.1**	**16.3**	**100.0**
Canada, excluding Québec	**53.9**	**9.1**	**17.9**	**19.1**	**100.0**
Atlantic Provinces	67.5	12.1	3.0	17.4	100.0
Ontario	50.1	7.1	22.1	20.7	100.0
Western Canada	54.8	10.2	16.9	18.1	100.0
Canada	**57.6**	**8.9**	**15.1**	**18.4**	**100.0**

e: Estimates
1. Regarding the organizational differences at the college level, see Section 1.4.
2. See Note 2 at the bottom of the text.

Graph 1.3

Total educational spending per capita: Québec, Ontario and Western Canada (in current dollars)



1.4 Total Educational Spending per Student in Relation to Per Capita GDP

When collective wealth is factored in, Québec's collective investment in education remains higher than the average for the rest of Canada.

Total per-student spending is an indicator of financial investment in education, and the per capita gross domestic product (GDP) is an indicator of collective wealth. Relating the two provides an indicator of the relative financial investment in education, that is, per-student spending expressed as a percentage of the per capita GDP. To calculate this indicator, the concept of spending per student is more inclusive than that used in other sections of this chapter.[1]

In 2001-2002, total per-student spending at the elementary and secondary levels ($7 499) was higher than in the Atlantic Provinces ($6 846), but lower than in Ontario ($7 552) and Western Canada ($7 835).

Total per-student spending at the college level was higher in Québec ($12 316) than in the Atlantic Provinces ($11 169) and in Ontario ($11 075), but lower than in Western Canada ($13 495) in 2000-2001, the most recent year for which data is available for this level. The comparisons of spending at the college level are provided as a reference only, since this level cannot truly be compared between regions because of significant organizational differences. For example, in Québec, a Diploma of College Studies in pre-university education is the usual requirement for admission to university, whereas in the other provinces, a secondary school diploma is generally sufficient. In Ontario, college-level programs are offered at colleges of applied arts and technology. In some cases, the programs offered can be compared, to a certain extent, with vocational education programs offered by Québec school boards. More often, they are comparable to the technical education programs offered by Québec CEGEPs. Furthermore, in some provinces in Western Canada (especially Alberta and British Columbia), students can do their first two years of university studies in a college, and then finish their studies at a university.

---

1. Total educational spending includes the operating and capital expenses of all levels of public and private education, the Ministère's administrative expenses, government contributions to employee pension plans, the cost of student financial assistance and other education expenses (as defined by Statistics Canada). Moreover, in the calculation of total per-student spending at the university level, funded research has been excluded. Also, in the calculation of per-student spending at the college and university levels, a standardized accounting of student enrollment for all the provinces based on the following convention has been used: part-time enrollments are converted into full-time equivalents by dividing them by 3.5, and they are then added to the full-time enrollments.

Total per-student spending at the university level in 2001-2002 was higher in Québec ($17 491) than in the Atlantic Provinces ($17 254) and in Ontario ($16 834), but lower than in Western Canada ($21 067). The previously mentioned organizational differences partly explain the gaps observed between the regions.

Table 1.4b shows total per-student spending in relation to the per capita GDP. Factoring in collective wealth, as measured by the per capita GDP, reveals that Québec's collective financial investment in education remains higher than the average for the rest of Canada. The gaps with Ontario are particularly significant, because of the considerable difference in the provinces' collective wealth.

Table 1.4a

Total per-student educational spending: Québec and the other regions of Canada, 2001-2002[e] (2000-2001[e] for the college level) ($)

	Elementary and secondary	College	University
Québec	**7 499**	**12 316**	**17 491**
Canada, excluding Québec	**7 636**	**12 185**	**18 627**
Atlantic Provinces	6 846	11 169	17 254
Ontario	7 552	11 075	16 834
Western Canada	7 835	13 495	21 067
Canada	**7 606**	**12 236**	**18 352**

Table 1.4b

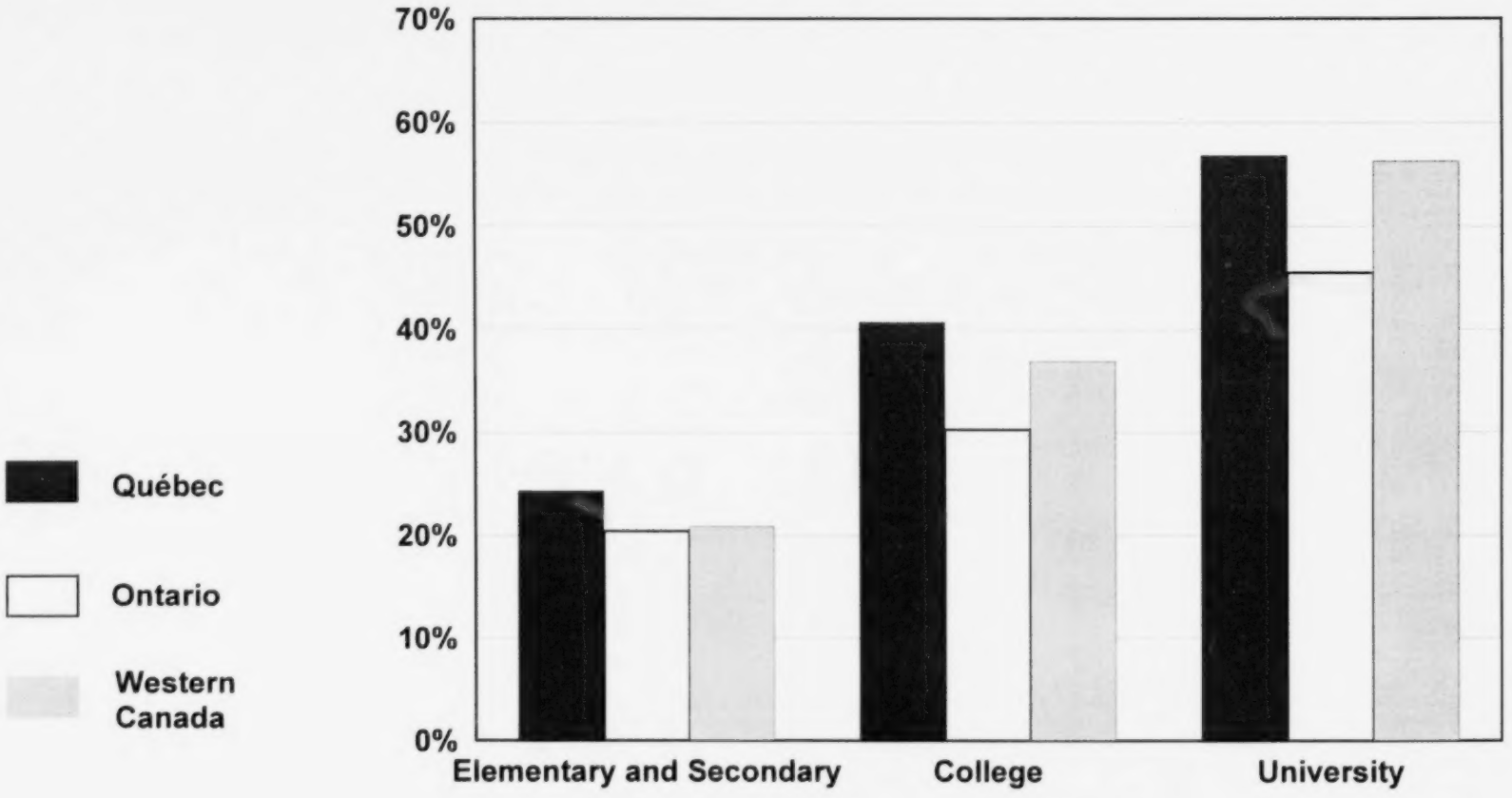
Total per-student educational spending in relation to the per capita GDP: Québec and other regions of Canada, 2001-2002[e] (2000-2001[e] for the college level) (%)

	Elementary and secondary	College	University
Québec	**24.3**	**40.7**	**56.8**
Canada, excluding Québec	**21.1**	**34.2**	**51.5**
Atlantic Provinces	26.0	43.3	65.5
Ontario	20.4	30.2	45.5
Western Canada	20.9	36.9	56.3
Canada	**21.8**	**35.6**	**52.6**

e: Estimates

Graph 1.4

Total per-student educational spending in relation to the per capita GDP: Québec, Ontario and Western Canada, 2001-2002 (2000-2001 for the college level) (%)



1.5 Cost of Educating Graduates

In 2001-2002, the total cost of a secondary school diploma was estimated at $91 488, of a college-level pre-university or technical diploma, at $117 193 and $146 801, respectively, and of a bachelor's degree, at $180 161.

In 2001-2002, the total cost of a bachelor's degree was approximately $180 000 in Québec.

The concept of expenses used here includes operating expenses (excluding funded research), capital expenses of educational institutions, the Ministère's administrative expenses, government contributions to employee pension plans, the cost of financial assistance to students, and other education expenses. For graduates with a Secondary School Diploma (SSD), the cost is based on all the years during which school was attended at the preschool, elementary (regular) and secondary (general) levels. For students graduating with a Diploma of College Studies (DCS) in pre-university education, the cost is based on all the years attended at the preschool, elementary (regular), secondary (general) and college (pre-university) levels. For students graduating with a DCS in technical education, the cost is based on all the years attended at the preschool, elementary (regular), secondary (general) and college (technical) levels. For graduates with a bachelor's degree, the cost is based on all the years attended at the preschool, elementary (regular), secondary (general), college (pre-university) and undergraduate levels.

To calculate the cost of educating a graduate, an estimate of the annual spending per student at each level of education in 2001-2002 was used,[1] as well as the average duration of studies completed by those who obtained the diploma or degree.[2] The expenses incurred by students leaving school without a diploma or degree were not taken into account.

According to Section 1.3, government subsidies make up a large part of the funding for education. However, the government also reaps a large portion of the benefits related to the earning of diplomas or degrees.

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1. Here, the university level encompasses undergraduate, graduate and doctoral studies. The cost of studies leading to a bachelor's degree is therefore slightly overestimated.
2. At the university level, one year of studies equals two full-time terms. A part-time term is counted as one third of a full-time term at the university level and one quarter at the college level.

When we compare the income of two individuals with different levels of schooling, we usually observe that the person with the higher level of education is the one with the higher income (see Graph 1.5). This extra income benefits not only the person with the higher level of education, but society as well. In fact, through taxation, governments recover a large portion of the extra income earned by the individual with the higher level of education. There are, however, a number of other public benefits in addition to the supplementary tax income produced by an increase in the number of graduates. For example, people with a higher level of education cost less to society in terms of the use of certain public services.[3]

3. See Marius Demers, "The Return on Investment in Education," *Education Statistics Bulletin* 8 (Québec: Ministère de l'Éducation, Direction des statistiques et des études quantitatives, February 1999). This document examines the profitability of investing in education and is available on the Internet at <http://www.meq.gouv.qc.ca>. For an analysis of the situation from the point of view of young people acquiring additional education, see Marius Demers "Education Pays!" *Education Statistics Bulletin* 16 (June 2000).

Table 1.5

Cost of educating graduates, 2001-2002

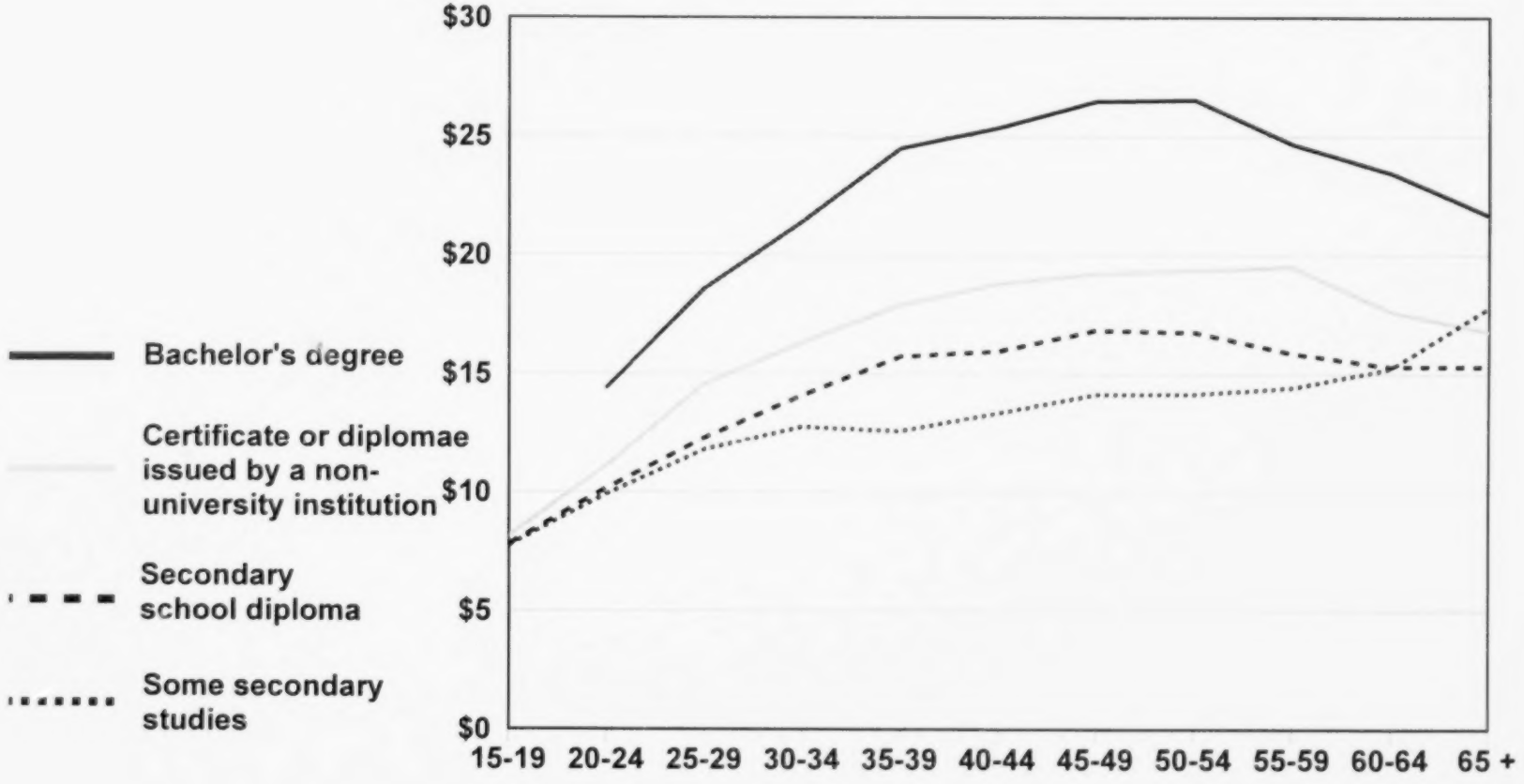
	Average duration of studies[1] (years)	Cost of education ($)[e]
Secondary School Diploma	11.2	91 488
Diploma of College Studies		
Pre-university education	13.6	117 193
Technical education	15.0	146 801
Bachelor's degree	17.2	180 161

e: Estimates

1. Preschool education is included in the cost but not in the average duration of studies indicated in the table, since it is not generally recognized as a year of academic pursuit.

Graph 1.5

Average hourly wage, by age group and highest level of schooling achieved, 2001 ($)



1.6 Total Spending on Elementary and Secondary Education in Relation to GDP

In 2001-2002, Québec spent a larger share of its GDP on elementary and secondary education than the rest of Canada.

In 2001-2002, it was estimated that 4.0% of Québec's gross domestic product (GDP) was spent on elementary and secondary education,[1] compared with the Atlantic Provinces at 4.2%, Ontario at 3.6%, and Western Canada at 3.7%. In the United States, the share of GDP allocated to elementary and secondary education was estimated at 4.3%. Québec therefore spent a larger share of its GDP on elementary and secondary education than the average for the rest of Canada. It should also be kept in mind that the duration of elementary and secondary education in Québec is shorter.[2]

In 1981-1982, the gap between the share of GDP allocated to elementary and secondary education in Québec and in the rest of Canada was very wide (1.7 percentage points, or $1.4 billion).

Between 1981 and 1989, the share of GDP allocated to elementary and secondary education dropped from 6.0% to 4.4% in Québec, while it remained stable in the rest of Canada (as a whole) and rose in the United States. The gap of 1.7 percentage points recorded in 1981-1982 between Québec and the rest of Canada narrowed steadily in subsequent years and disappeared almost entirely in 1989-1990. That same year, the share of GDP spent on elementary and secondary education in Québec was slightly higher than in the United States. The fact that Québec has now reached the North American average can be explained largely by the more restrictive measures adopted by the Québec government to control spending during that period.

Between 1989 and 1993, a period of economic recession, the share of GDP allocated to education rose almost everywhere in Canada and the United States, such that, in 1993-1994, Québec spent 4.9% of its GDP on elementary and secondary education, that is, the same percentage as the rest of Canada, while the United States spent 4.3%.

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1. In 2001-2002, Québec spent $9.0 billion of its $228.5-billion GDP on public and private elementary and secondary education. The concept of total spending used in this section is defined at the bottom of Table 1.6.
2. The duration of elementary and secondary education is 11 years in Québec and normally 12 years in the other regions considered.

Between 1993 and 2000, the share of GDP spent on elementary and secondary education decreased in Québec and the other provinces, following budget cuts to school boards. In the United States, it remained essentially stable.

In 2001-2002, the share of GDP spent on elementary and secondary education increased slightly in Québec and the United States and remained stable in the rest of Canada.

When the share of Québec's GDP spent on elementary and secondary education is compared with that of the member countries of the Organisation for Economic Co-operation and Development (OECD) in 1999, Québec ranked near the average for OECD countries considered.[3]

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3. The most recent year for which data is available on the share of GDP allocated to education for the OECD countries is 1999. For more information regarding comparisons with member countries of the OECD, see Marius Demers,"Educational Spending Relative to the GDP in 1997: A Comparison of Québec and the OECD Countries," *Education Statistics Bulletin* 20 (Québec: Ministère de l'Éducation, Direction des statistiques et des études quantitatives, November 2000). This document is available on the Internet at <http://www.meq.gouv.qc.ca>.

Table 1.6

Spending on elementary and secondary education[1] in relation to GDP: Québec, the other regions of Canada, and the United States (%)

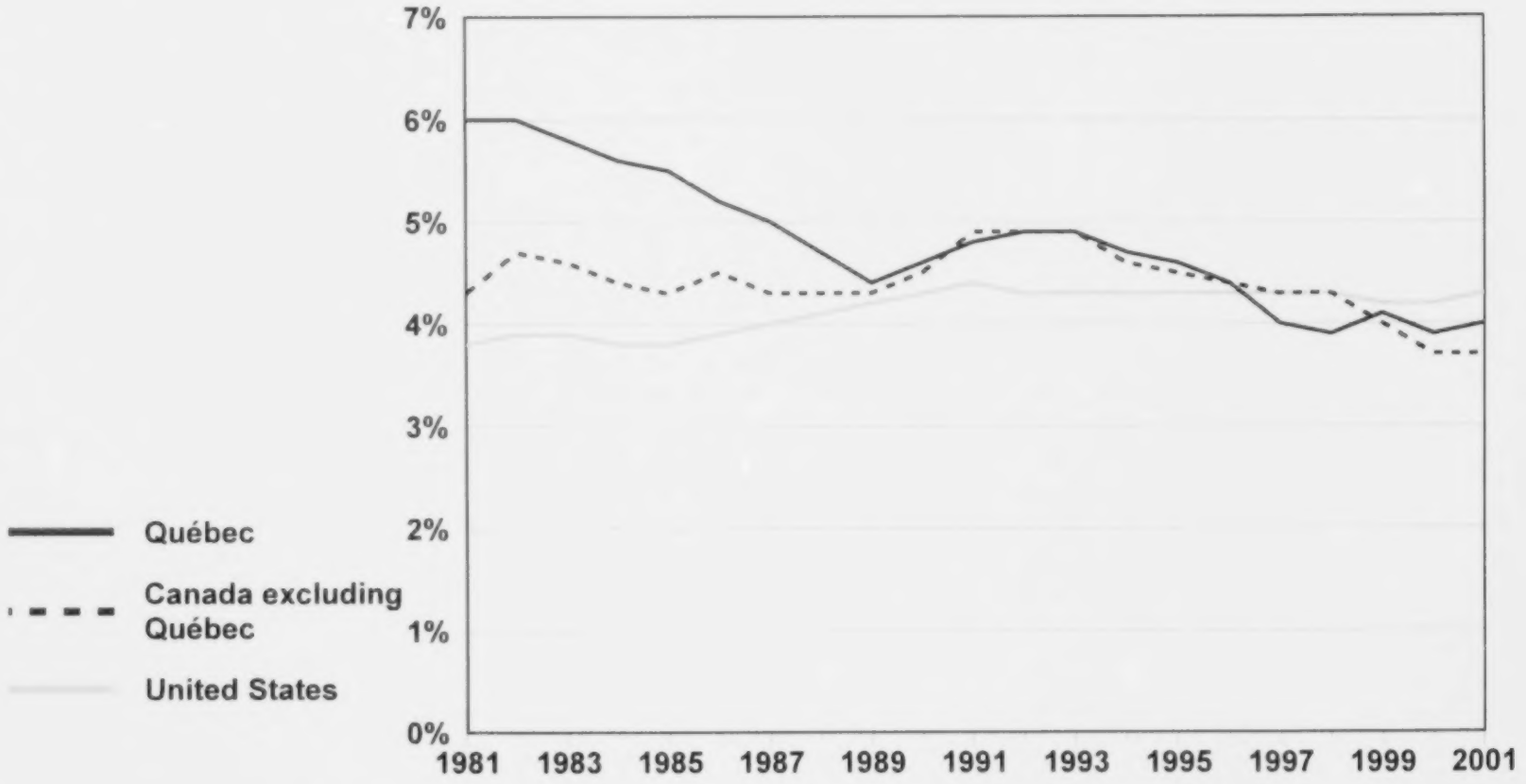
	1981-1982	1989-1990	1993-1994	1999-2000[e]	2000-2001[e]	2001-2002[e]
Québec	**6.0**	**4.4**	**4.9**	**4.1**	**3.9**	**4.0**
Canada, excluding Québec	**4.3**	**4.3**	**4.9**	**4.0**	**3.7**	**3.7**
Atlantic Provinces	6.9	5.7	5.6	4.7	4.2	4.2
Ontario	4.4	4.3	5.1	3.9	3.6	3.6
Western Canada	3.7	4.1	4.4	4.0	3.7	3.7
Canada	**4.7**	**4.3**	**4.9**	**4.0**	**3.8**	**3.8**
United States	**3.8**	**4.2**	**4.3**	**4.2**	**4.2**	**4.3**

e: Estimates

1. These figures include the operating and capital expenses for public and private elementary and secondary education, the Ministère's administrative expenses (the portion attributable to elementary and secondary education), government contributions to employee pension plans and other education expenses (as defined by Statistics Canada).

Graph 1.6

Total spending on elementary and secondary education in relation to GDP: Québec, Canada excluding Québec, and the United States (%)



1.7 School Board Spending in Current and Constant Dollars

In 2001-2002, school board spending in Québec was estimated at $7.8 billion, student enrollments at approximately 1.1 million, and per-student spending in current dollars at $7 125.[1]

From 1998 to 2001, school board spending per student increased by 20%.

Previous editions of the *Education Indicators* showed that during the 1970s, school board spending rose significantly in Québec in a context of high inflation. Spending can also be expressed in constant dollars, so as to factor in the rise in the price of goods and services used to provide educational services.[2] The figures show that spending in constant dollars remained relatively stable between 1976 and 1981, while enrollments declined by 17%. This resulted in a significant increase in real funds available per student. The following factors contributed to this rise: a lower student-teacher ratio, an increase in teacher qualifications recognized for salary purposes, and the higher cost of job security for teachers.

In the 1980s, a lower inflation rate, salary restrictions and generally more conservative budget policies considerably curbed the rapid rise in school board spending.

In the early 1990s, per-student spending in constant dollars increased slightly, and then fell again so that, in 1998-1999, it was slightly lower than in 1990-1991. The decrease observed between 1994 and 1998 can be explained by budget cutbacks and the application of cost-cutting measures in Québec school boards, as well as by the introduction of full-time kindergarten in 1997-1998, which caused a drop in per-student spending.[3]

Between 1998 and 2001, there was a 20% increase in per-student spending in current dollars and a 9% increase in constant dollars. These increases are primarily the result of the agreement concluded in April 2000 between the

1. See Note 1 at the bottom of Table 1.7. The concept of spending is the same as that used in Section 1.8.
2. The school boards' education price index is used to express spending in constant dollars. This index indicates changes in the price of goods and services used to provide educational services. Changes in spending in constant dollars reflect changes in the real funds available to school boards.
3. The introduction of full-time kindergarten resulted in an increase in the "relative weight" of a relatively inexpensive sector of enrollments.

Québec government and the unions regarding a new salary structure for teachers (as part of pay equity),[4] of the signing of a new collective agreement and of support measures for school boards (additional funding for child-care services,[5] implementation of the education reform, special education policy, professional development of teachers and hiring of technicians for the development of information technologies, support for economically disadvantaged areas, funding to reduce the fees charged to parents, etc.) and, in more general terms, of the amounts reinvested by the government in education.[6]

---

4. Salary scales were adjusted retroactively to 1995-1996 but the school boards' financial statements do not take them into account until 1999-2000; this explains the large increase observed in 1999-2000 (significant adjustment of salary scales compared with the previous year). It is important to note, however, that the amounts paid retroactively in 1999-2000 for past years are not considered for the purpose of calculating per-student spending in 1999-2000 and that per-student spending for past years has not been adjusted.
5. Following a policy limiting the financial contribution of parents to $5 a day for each child enrolled on a regular basis in child-care services.
6. For example, additional money for "other expenses" to allow for increases in amounts other than those related to human resources.

Table 1.7

School board spending[1]

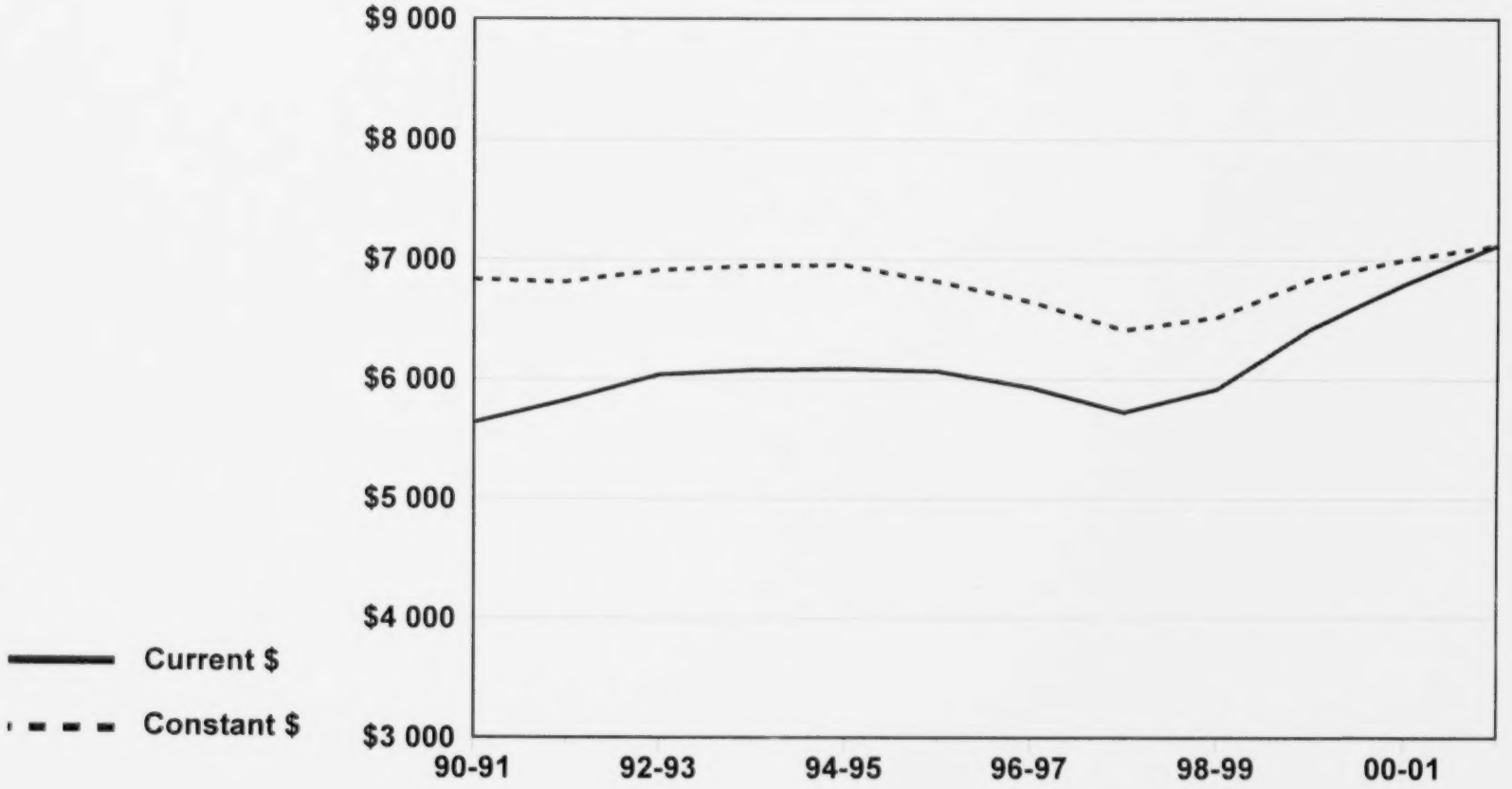
	1990-1991	1994-1995	1998-1999	1999-2000	2000-2001	2001-2002[e]
Total spending (in millions of dollars)						
In current dollars	6 001.8	6 583.7	6 607.6	7 076.5	7 437.8	7 757.4
In constant 2001-2002 dollars[2]	7 281.1	7 522.6	7 278.6	7 531.4	7 663.9	7 757.4
Spending per student ($)						
In current dollars	5 634	6 083	5 919	6 424	6 797	7 125
In constant 2001-2002 dollars[2]	6 834	6 951	6 521	6 836	7 003	7 125

e: Estimates

1. Operating expenses exclude debt service (long-term and current liabilities), capital expenses financed directly from current revenues, and transfer expenses. The direct contribution of the Québec government to school board employee pension plans is included in the operating expenses.
2. See Note 2 at the bottom of the text.

Graph 1.7

School board spending in current dollars and in constant 2001-2002 dollars



1.8 School Board Spending per Student

In 2001-2002, spending per student[1] by Québec school boards was estimated at $7 125, compared with the Atlantic Provinces at $6 096, Ontario at $6 868, and Western Canada at $7 037. In the United States, per-student spending was estimated at $9 282.[2]

In 2001-2002, school board spending per student in Québec was slightly higher than the Canadian average, but lower than in the United States.

Previous editions of the *Education Indicators* showed that spending per student rose more rapidly in Québec than in the rest of Canada and the United States in the 1970s. The sharper decline in Québec enrollments accounted for a large increase in per-student spending, owing to constraints which prevented expenses from being slashed in proportion to the drop in enrollments. More costly salary policies, a greater decrease in the student-teacher ratio and the higher cost of job-security policies also contributed to the more rapid rise of per-student spending in Québec during this period.

In the 1980s, a reversal occurred: per-student spending rose more slowly in Québec than in the rest of Canada and the United States. In Québec, the slower growth in spending was a result of salary-restriction measures applied to school board employees. During that time, the working conditions of school board employees were improving significantly in Ontario and in the United States, with the result that per-student costs have been higher in these regions than in Québec since the mid-1980s.

---

1. The basic data used in this section comes from an annual survey conducted by the British Columbia Ministry of Education among all Canadian provinces. Some data not provided by the survey has been estimated based on Statistics Canada data.
2. For the purposes of this comparison, per-student spending in the United States is expressed in Canadian dollars. American dollars are converted to Canadian dollars using the purchasing power parity rates (PPP) set by the OECD. "Purchasing Power Parities (PPPs) are the rates of currency conversion that equalize the purchasing power of different currencies. This means that a given sum of money, when converted into different currencies at the PPP rates, will buy the same basket of goods and services in all countries. Thus, PPPs are the rates of currency conversion which eliminate differences in price levels between countries." (OECD, *National Accounts*).

Between 1990 and 2001, per-student spending varied in Canada and, in 2001-2002, per-student spending in Québec was slightly higher than the Canadian average. It should be noted that per-student spending in Québec increased by 20% between 1998 and 2001. The considerable increase in per-student spending in current dollars is primarily the result of the agreement concluded in April 2000 between the Québec government and the unions regarding a new salary structure for teachers (as part of pay equity), the signing of a new collective agreement, support measures for school boards and, in more general terms, amounts reinvested by the government in education.[3]

In the United States, per-student spending was on an upward trend in 2001-2002 and was 30% higher than in Québec. A comparison with the United States as a whole for 2001-2002 reveals that per-student spending was higher in 45 U.S. states[4] than in Québec and Ontario, and lower in 6 states.

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3. See Section 1.7.
4. Including the District of Columbia.

Table 1.8

School board spending per student:[1] Québec, the other regions of Canada, and the United States (in current dollars[2])

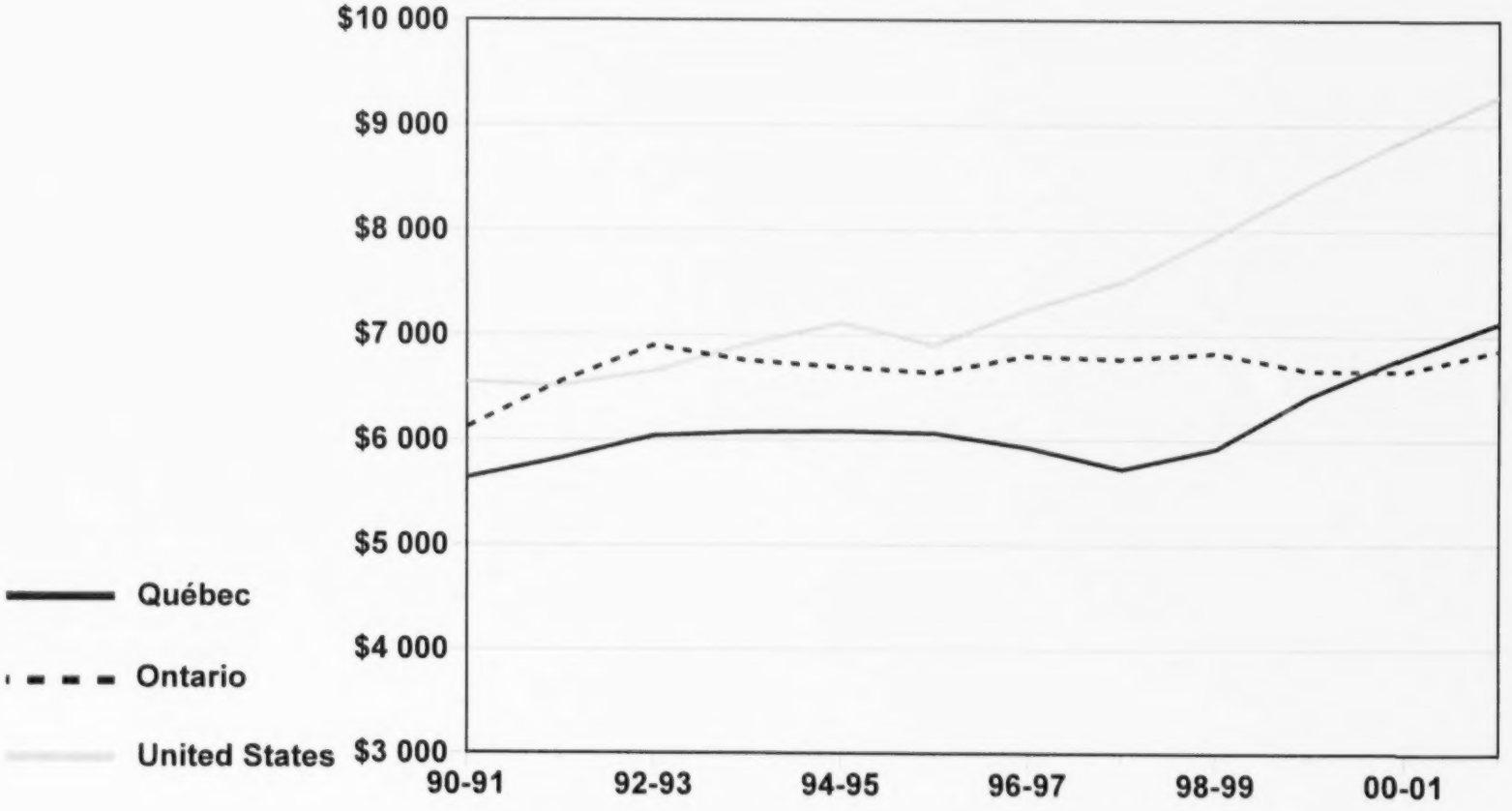
	1990-1991	1994-1995	1998-1999	1999-2000	2000-2001	2001-2002[e]
Québec	**5 634**	**6 083**	**5 919**	**6 424**	**6 797**	**7 125**
Canada, excluding Québec	**5 607**	**6 172**	**6 498**	**6 529**	**6 660**	**6 870**
Atlantic Provinces	4 538	4 959	5 403	5 816	5 866	6 096
Ontario	6 114	6 696	6 834	6 669	6 666	6 868
Western Canada	5 235	5 782	6 306	6 502	6 828	7 037
Canada	**5 613**	**6 152**	**6 370**	**6 506**	**6 690**	**6 926**
United States	**6 551**	**7 114**	**7 950**	**8 435**	**8 873**	**9 282**

e: Estimates

1. Operating expenses exclude debt service (long-term and current liabilities) and capital expenses financed directly from current revenues. The direct contribution of the Québec government to school board employee pension plans is included in the operating expenses.
2. See Note 2 at the bottom of the text.

Graph 1.8

School board spending per student: Québec, Ontario and the United States (in current dollars)



1.9 Student-Teacher Ratio in School Boards

In 2001-2002, the average number of students per educator was lower in Québec than in the other provinces, but higher than in most U.S. states.

In 2001-2002, the average number of students per teacher in school boards was estimated at 15.9 in Québec and 15.5 in the United States. The student-teacher ratio is calculated by dividing the number of students by the number of teachers in the school boards. Data on enrollments and teaching personnel is expressed in full-time equivalents. The ratio therefore does not indicate the average number of students per class. To understand the difference between these two ratios, the student-teacher ratio must be considered as a composite indicator that is the result of three variables: the average number of students per class, the average teaching time of teachers and the average instruction time for students.

In 2001-2002, the student-teacher ratio in Québec school boards was therefore 0.4 students higher than that for the United States. A comparison of Québec with the United States as a whole for 2001-2002 reveals that the student-teacher ratio was higher in 16 states and lower in 35 states.[1]

The data available for the other provinces uses a broader concept of personnel. In addition to teachers, educators also include school administrators and nonteaching professionals who work with students (e.g. education consultants, guidance counsellors and pastoral animators).[2] Table 1.9b contains data on the student-educator ratio. In 2001-2002, this ratio was lower in Québec (14.6) than in the Atlantic Provinces (15.7), Ontario (16.0) and Western Canada (16.4). The lower number of students per educator in Québec than in Ontario is largely due to the average teaching time of teachers, which is lower in Québec. For example, the average teaching time of teachers in Québec was 615 hours per year at the secondary level, while that of their counterparts in Ontario was 740 hours. Since the average class size was approximately the same in both provinces and the average instruction time for students was 900 hours in Québec and 950 hours in Ontario, the lower average teaching time of teachers in Québec resulted in the need to hire more teachers.

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1. Including the District of Columbia.
2. The basic data used in this section comes from an annual survey conducted by the British Columbia Ministry of Education among all Canadian provinces. Some data not provided by the survey has been estimated based on Statistics Canada data.

In the 1990s, the student-educator ratio varied slightly in Québec and the Atlantic Provinces, while it increased at a greater rate in Western Canada. In Ontario, it rose significantly. The increase in Ontario was due to job cuts resulting from the application of the 1993 Social Contract legislation. One of the objectives of this legislation was to reduce the number of teachers in school boards. There were also budget cutbacks in Québec in the 1990s, but they affected mostly salaries. It should also be noted that, in their contract negotiations, Québec unions have always given priority to employment levels and job descriptions.

The average number of students per educator has a major impact on school board spending per student and the gap of 1.6 between the student-teacher ratio in Québec (14.6) and in the rest of Canada (16.2) in 2001-2002 is the main reason why per-student spending is higher in Québec than in the rest of Canada.[3]

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3. See Section 1.8.

Table 1.9a

Student-teacher ratio in school boards: Québec and the United States

	1990-1991	1994-1995	1998-1999	1999-2000	2000-2001	2001-2002[e]
Québec	16.1	15.8	16.2	16.4	16.2	15.9
United States	16.7	16.8	16.0	15.7	15.6	15.5

Table 1.9b

Student-educator ratio[1] in school boards: Québec and the other regions of Canada

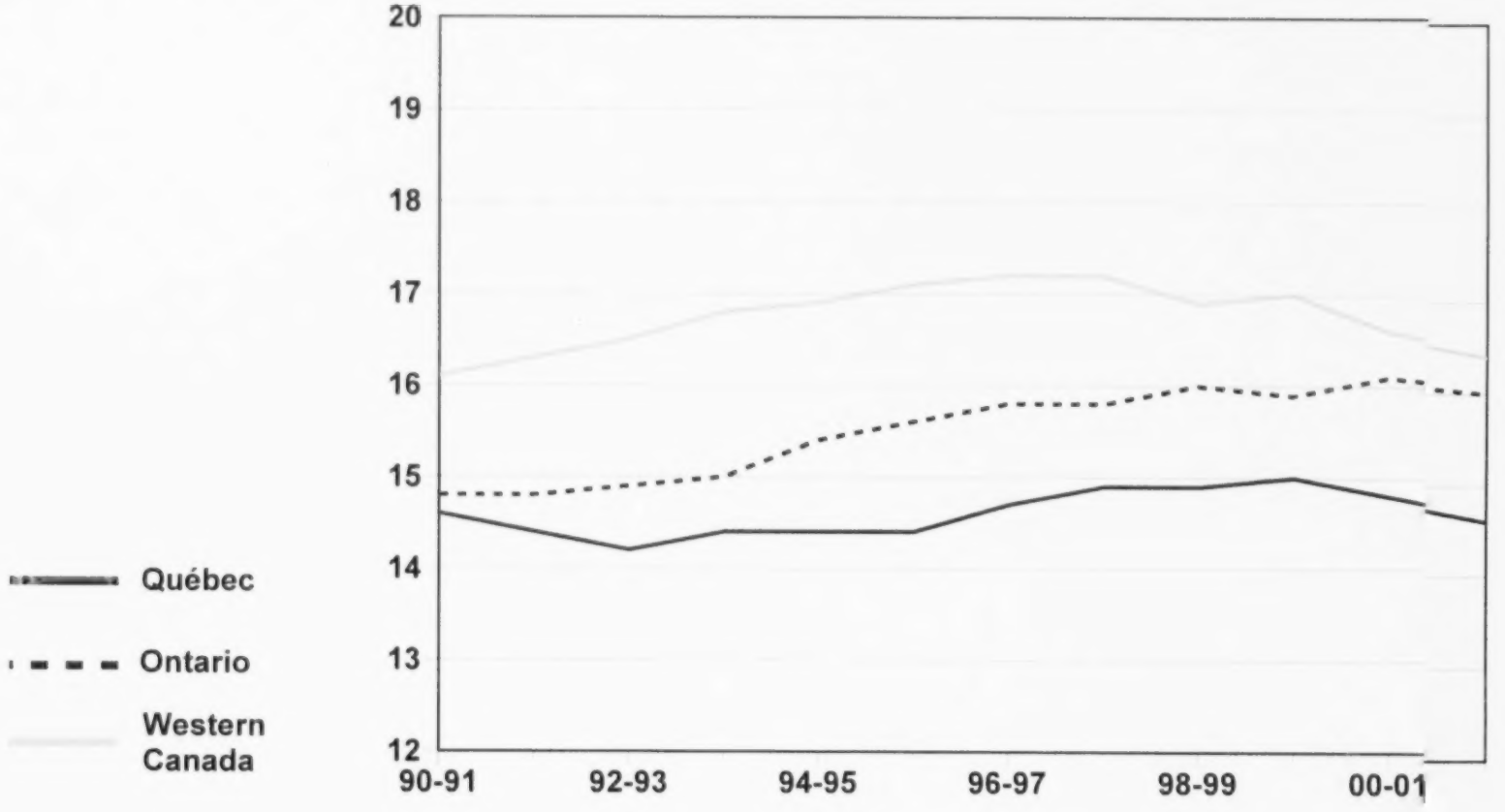
	1990-1991	1994-1995	1998-1999	1999-2000	2000-2001	2001-2002[e]
Québec	**14.6**	**14.4**	**14.9**	**15.0**	**14.8**	**14.6**
Canada, excluding Québec	**15.4**	**16.0**	**16.3**	**16.3**	**16.2**	**16.2**
Atlantic Provinces	15.9	16.4	16.3	16.0	15.8	15.7
Ontario	14.8	15.4	16.0	15.9	16.1	16.0
Western Canada	16.1	16.9	16.9	17.0	16.6	16.4
Canada	**15.2**	**15.6**	**16.0**	**16.0**	**15.9**	**15.8**

e: Estimates

1. See definition in the text.

Graph 1.9

Student-teacher ratio in school boards: Québec, Ontario and Western Canada



1.10 Average Salary of Teachers in School Boards

In 2001-2002, educators in Québec earned less than educators in neighbouring regions, but the gap has narrowed in recent years.

In 2001-2002, the average salary of teachers in Québec school boards was estimated at $48 358,[1] compared with $55 470 in the United States.[2] A comparison of Québec with the United States as a whole for 2001-2002 reveals 25 U.S. states[3] where the average salary of teachers was higher than in Québec and 26 states where it was lower.

The data available for the other provinces uses a broader concept of personnel. In addition to teachers, educators also include school administrators and nonteaching professionals who work with students (e.g. education consultants, guidance counsellors and pastoral animators).[4] Table 1.10b contains data on the average salary of educators. In 2001-2002, the average salary of educators in Québec was lower than in the rest of Canada. The difference between the average salary in Québec ($51 262) and in the rest of Canada ($57 570) was 11%.

Between 1990 and 1998, the average salary of educators increased by 5% in Québec, while it rose by 19% in the rest of Canada. In Québec, in a battle against budget deficits, agreements between the government and unions have resulted in the average salary of teachers rising very little. Also, in 1997, a vast program of voluntary retirement resulted in a younger average age of teachers in Québec, and consequently, a decrease in the average salary.

1. The average salary is calculated for all Québec teachers (regardless of their status).
2. The calculation of the average salary of U.S. teachers is based on data from the National Education Association. This data was expressed in Canadian dollars using the purchasing power parity rates (PPP) set by the OECD. "Purchasing Power Parities (PPPs) are the rates of currency conversion that equalize the purchasing power of different currencies. This means that a given sum of money, when converted into different currencies at the PPP rates, will buy the same basket of goods and services in all countries. Thus, PPPs are the rates of currency conversion which eliminate differences in price levels between countries." (OECD, *National Accounts*).
3. Including the District of Columbia.
4. The basic data used in this section comes from an annual survey conducted by the British Columbia Ministry of Education among all Canadian provinces. Some data not provided by the survey has been estimated on the basis of Statistics Canada data.

However, there was a significant increase in the average salary of educators in Québec between 1998-1999 and 2001-2002 (14%), while the increase was much less pronounced in the rest of Canada (4%). The greater increase in Québec is primarily the result of the agreement concluded in April 2000 between the Québec government and the unions regarding a new salary structure for teachers (as part of pay equity) and of a new collective agreement. Salary scales were adjusted retroactively to 1995-1996 but the school boards' financial statements do not take them into account until 1999-2000; this explains the large increase observed in 1999-2000 (significant adjustment of salary scales compared with the previous year).[5]

The salary of teachers in school boards in Québec can be compared with that of the member countries of the Organisation for Economic Co-operation and Development (OECD) using indicators such as the starting salary, salary after 15 years of seniority and maximum salary.[6]

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5. It is important to note, however, that the amounts paid retroactively in 1999-2000 for past years are not considered for the purpose of calculating the average salary in 1999-2000 and that data on the average salary for past years has not been adjusted.
6. See Marius Demers, "Statutory Salaries of Teachers in Public Elementary and Secondary Schools in 1997-1998: A Comparison of Québec and OECD Countries," *Education Statistics Bulletin* 19, (Québec: Ministère de l'Éducation, Direction des statistiques et des études quantitatives, September 2000). This document is available on the Internet at <http://www.meq.gouv.qc.ca>.

Table 1.10a

Average salary of teachers in school boards: Québec and the United States (in current dollars[1])

	1990-1991	1994-1995	1998-1999	1999-2000	2000-2001	2001-2002[e]
Québec	40 478	43 080	42 908	45 314	46 992	48 358
United States	43 009	45 844	48 290	49 687	52 435	55 470

Table 1.10b

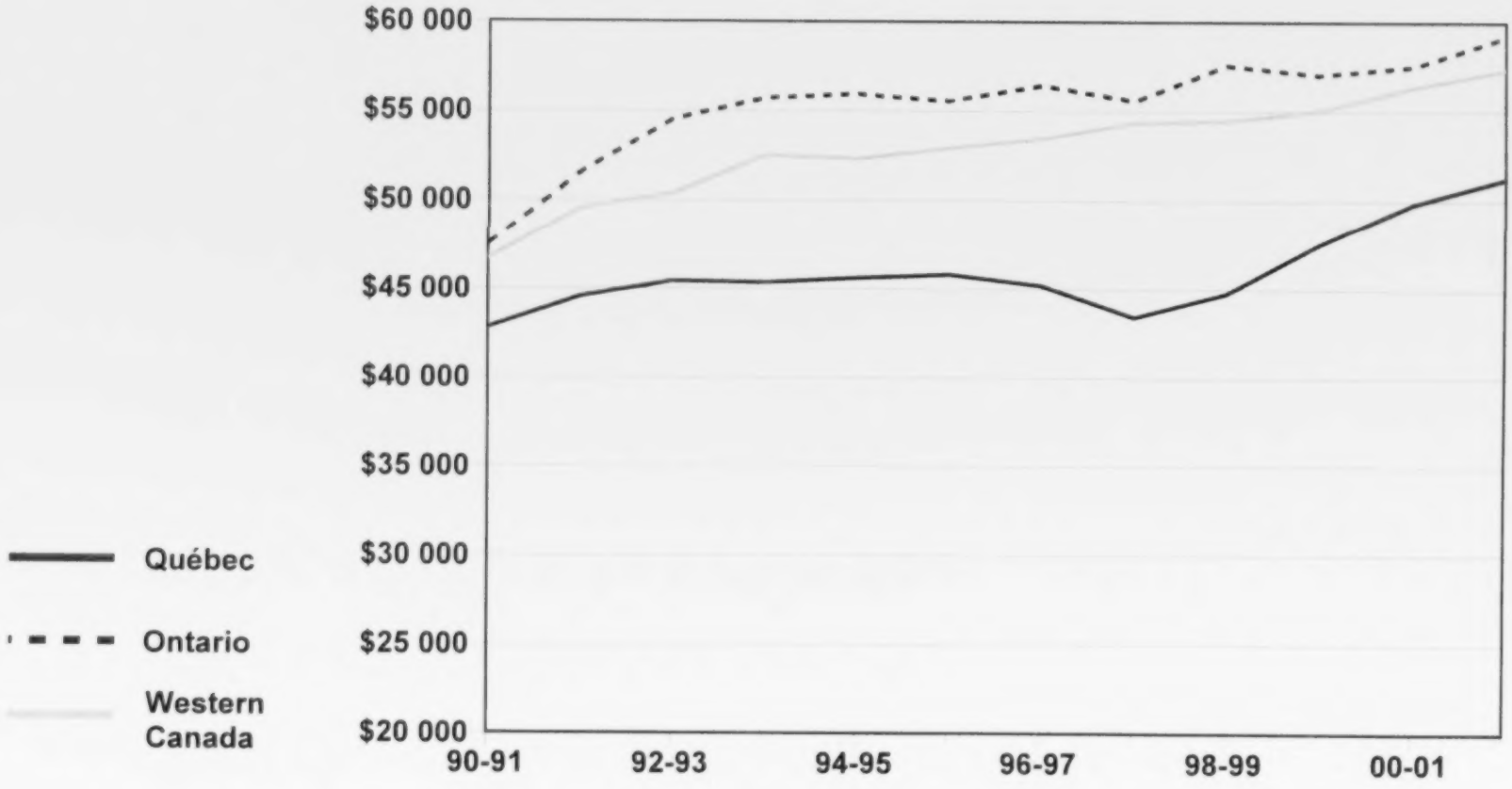
Average salary of educators[2] in school boards: Québec and the other regions of Canada (in current dollars)

	1990-1991	1994-1995	1998-1999	1999-2000	2000-2001	2001-2002[e]
Québec	**42 801**	**45 610**	**44 772**	**47 545**	**49 829**	**51 262**
Canada, excluding Québec	**46 898**	**53 728**	**55 602**	**55 446**	**56 166**	**57 570**
Atlantic Provinces	44 588	47 104	49 164	50 477	50 342	51 951
Ontario	47 470	55 932	57 575	57 055	57 522	59 193
Western Canada	46 691	52 315	54 482	55 065	56 369	57 348
Canada	**45 926**	**51 772**	**53 017**	**53 592**	**54 683**	**56 081**

e: Estimates
1. See Note 2 at the bottom of the text.
2. See definition in the text.

Graph 1.10

Average salary of teachers in school boards: Québec, Ontario and Western Canada (in current dollars)



1.11 CEGEP Spending

In 2001-2002, CEGEP spending on regular education was estimated at approximately $1.2 billion, with student enrollments at roughly 146 000.[1] Per-student spending was an estimated $8 057.

Between 1998-1999 and 2001-2002, CEGEP spending increased by 13%, in spite of a 6% decrease in enrollments. This resulted in a significant increase in per-student spending.

The previous edition of the *Education Indicators* showed that, between 1976 and 1981, CEGEP spending on regular education increased significantly. This marked increase can be explained primarily by a high inflation rate, salary increases exceeding the inflation rate, and a considerable rise in enrollments.

Between 1981 and 1989, the rise in CEGEP spending was sharply curbed, with the average annual rate of increase in current-dollar spending dropping to 4.2%. This decrease was a result of a curtailment of the inflation rate, as well as budget cutbacks adopted by the Québec government. Enrollments also continued to rise until the mid-1980s, but then declined. Per-student spending in constant dollars was slightly lower in 1989-1990 than in 1981-1982.[2]

In 1990-1991, per-student spending in current dollars was $6 920, or 8.6% higher than in 1989-1990 (which corresponds to a real growth of 3.4%). This increase can be explained primarily by a decline in the student-teacher ratio following the addition of new positions as part of a collective agreement. The increase in the number of teachers applies to activities such as departmental committees, practicums, professional development, and student support services.

In the 1990s, per-student spending in constant dollars followed a downward trend. This can be explained by budget cutbacks and the application of cost-cutting measures in CEGEPs. These measures were largely the result of

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1. Data on enrollments is based on fall registration recognized for the purpose of estimating costs.
2. The CEGEPs' education price index is used to express spending in constant dollars. This index indicates changes in the price of goods and services used to provide educational services in CEGEPs. Changes in spending in constant dollars reflect changes in the real funds available to CEGEPs.

agreements between the government and unions, which made it possible to lower labour costs. Thus, between 1990 and 1998, per-student spending in constant dollars decreased by 12%.

Between 1998-1999 and 2001-2002, there was a 20% increase in per-student spending in current dollars and a 9% increase in constant dollars. These increases were due primarily to new collective agreements for all CEGEP employees, support measures for CEGEPs (for the development of new information technologies, for careers in science, for success measures, etc.) and, in more general terms, amounts reinvested in education by the government.

Table 1.11

CEGEP spending[1]

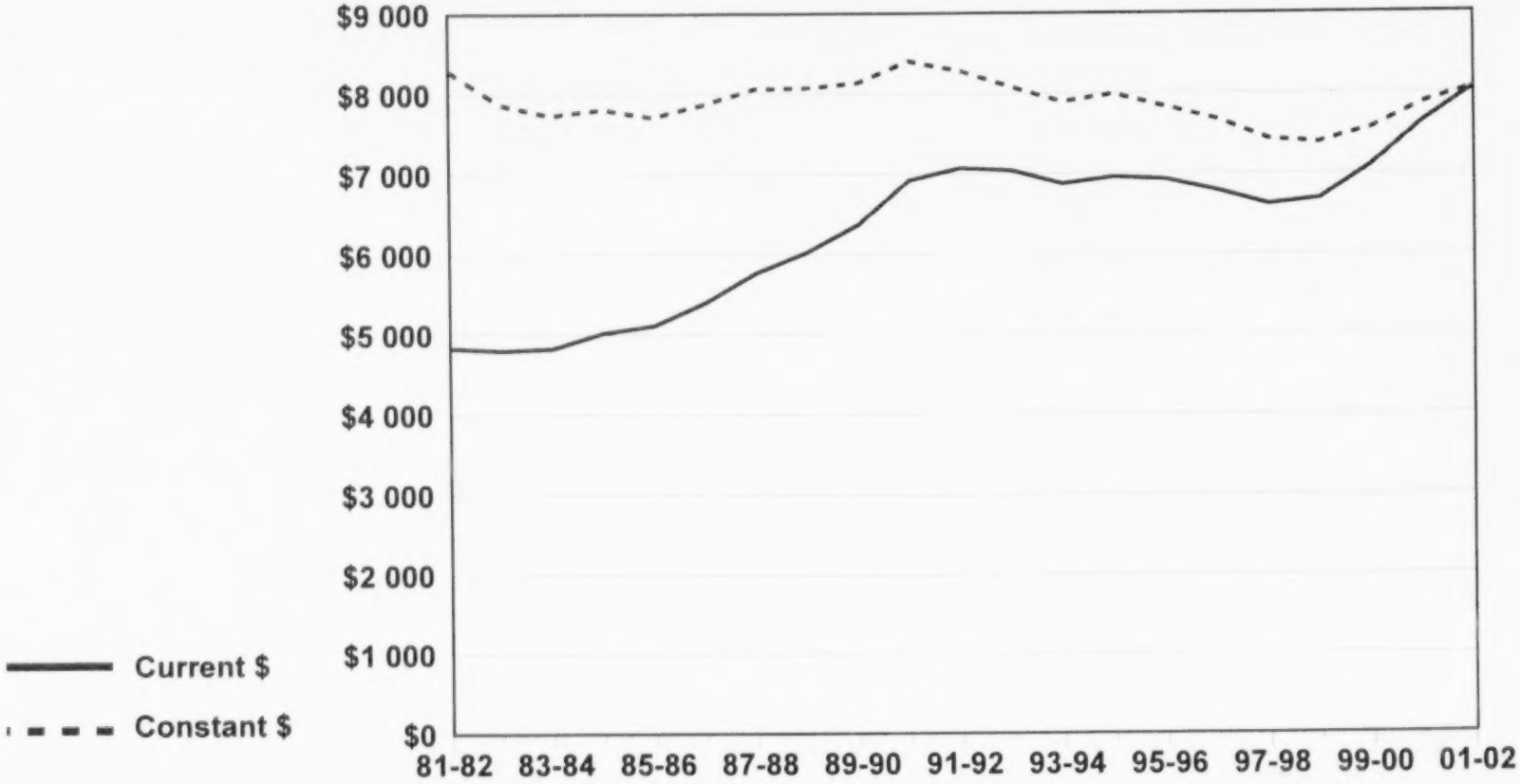
	1981-1982	1989-1990	1993-1994	1999-2000	2000-2001	2001-2002[e]
Total spending in current dollars (in millions of dollars)	596.0	830.7	1 074.9	1 082.6	1 134.6	1 174.3
Per-student spending in current dollars	4 831	6 370	6 876	7 095	7 632	8 057
Per-student spending in constant 2001-2002 dollars[2]	8 296	8 130	7 895	7 556	7 867	8 057

e: Estimates

1. Operating expenses exclude debt service (long-term and current liabilities) and capital expenses financed directly from current revenues.
2. See Note 2 at the bottom of the text.

Graph 1.11

CEGEP spending per student in current dollars and constant 2001-2002 dollars



1.12 Student-Teacher Ratio, Average Teacher Salary and Cost of Teachers per Student in CEGEPs

This section is a complement to Section 1.11, which analyzed the changes in CEGEP spending. Salary costs for teachers accounted for more than half the total of CEGEP spending in 2001-2002, and the changes in these costs were a determining factor in the changes in operating expenses.[1] Two factors determine the cost of teachers per student:[2] the student-teacher ratio, and the average salary of teachers in CEGEPs.

In 2001-2002, the average number of students per teacher in CEGEPs was estimated at 12.6 and the average teacher's salary at $54 611. The actual cost of teachers has increased by 8% since 1998-1999.

In 2001-2002, the average number of students per teacher in CEGEPs was estimated at 12.6 and the average teacher's salary at $54 611. The student-teacher ratio is calculated by dividing the number of students by the number of teachers in the CEGEPs.[3] The ratio therefore does not indicate the average number of students per class. To understand the difference between these two ratios, the student-teacher ratio must be considered as a composite indicator that is the result of three variables: the average number of students per class, the average teaching time of teachers and the average instruction time for students.

Between 1981 and 1989, the average number of students per teacher in CEGEPs rose from 12.3 to 14.3, while teachers' average salary increased by 36%, from $32 595 to $44 217. In comparison, the consumer price index (CPI) increased by 53% during this period. The per-student cost of teachers, in current dollars, went from $2 659 in

1. The salary costs considered in this section do not include employee benefits. If these were included, salary costs for teachers would account for more than 60% of total CEGEP operating expenses.
2. The cost of teachers per student is calculated by dividing the total payroll for teachers by the number of students.
3. Data on enrollments is based on fall registration recognized for the purpose of estimating costs and data on teaching personnel is expressed in full-time equivalents.

1981-1982 to $3 098 in 1989-1990, an increase of 17%, while the cost per student in constant dollars dropped by 14%.[4]

This decrease in the actual cost of teachers continued throughout most of the 1990s. The labour cost reduction measures mentioned in Section 1.11 contributed to this result. Of particular note, once again, is the program of voluntary retirement that resulted in a younger average age of teachers. These measures were taken as part of the battle against budget deficits undertaken by the Québec government in the 1990s.

However, between 1998 and 2001, there was an 8% increase in the cost of teachers in constant dollars, primarily because of new collective agreements for all CEGEP employees and an average decrease in the student-teacher ratio, from 13.8 in 1998-1999 to 12.6 in 2001-2002. Teachers' average salary was $54 611 in 2001-2002.

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4. The CEGEPs' education price index is used to express spending in constant dollars. This index indicates changes in the price of goods and services used to provide educational services in CEGEPs. Changes in spending in constant dollars reflect changes in the real funds available to CEGEPs.

Table 1.12

Student-teacher ratio,[1] average salary of teachers and cost of teachers per student in CEGEPs

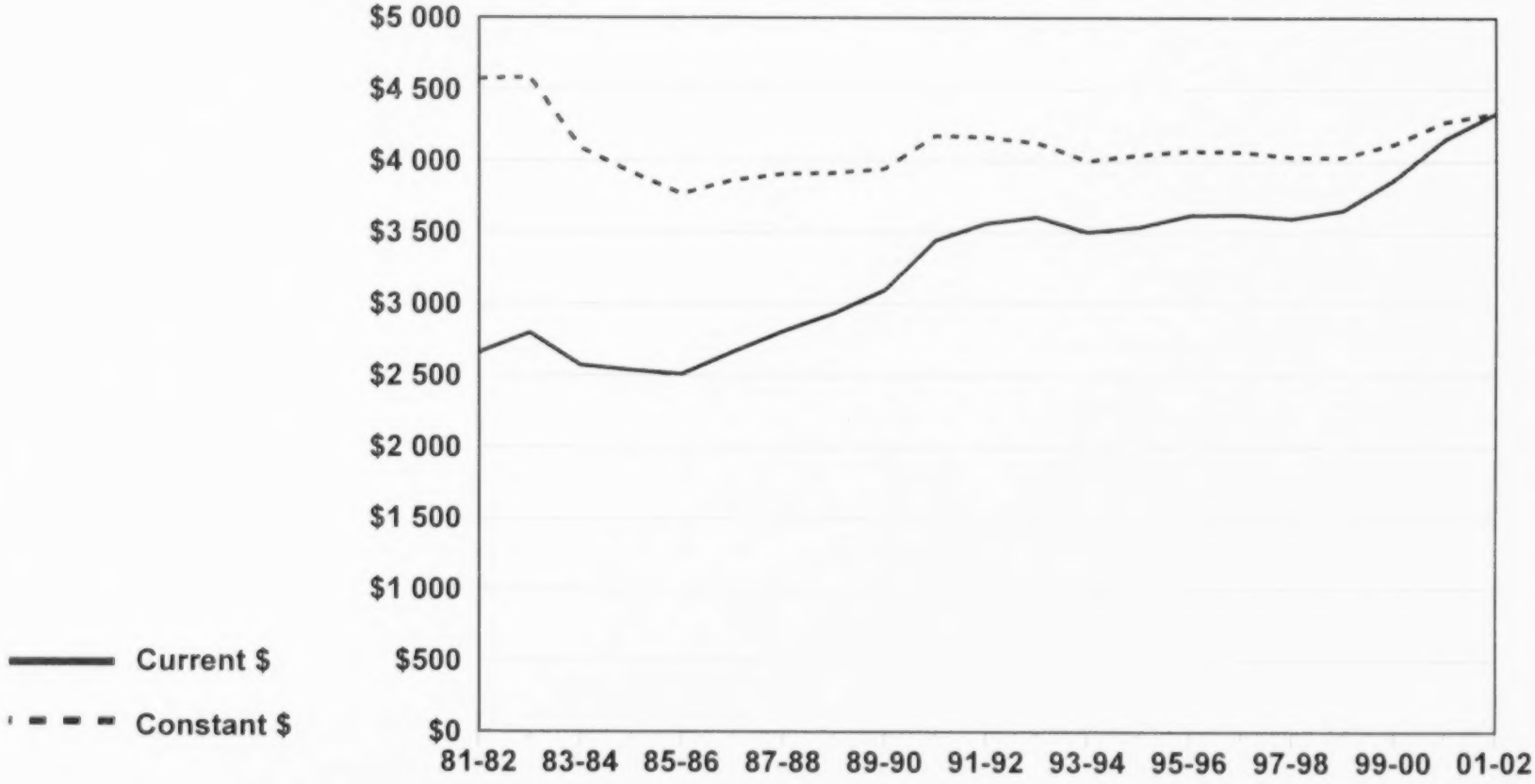
	1981-1982	1989-1990	1993-1994	1999-2000	2000-2001	2001-2002[e]
Student-teacher ratio	12.3	14.3	13.9	13.4	12.8	12.6
Average salary in current dollars	32 595	44 217	48 789	51 722	53 217	54 611
Cost of teachers per student						
In current dollars	2 659	3 098	3 503	3 873	4 154	4 339
In constant 2001-2002 dollars	4 573	3 947	4 003	4 122	4 280	4 339

e: Estimates

1. See Note 3 at the bottom of the text.

Graph 1.12

Cost of teachers per student in CEGEPs in current dollars and constant 2001-2002 dollars



1.13 Total University Spending in Relation to GDP

In 2001-2002, 1.69% of GDP was allocated to university education in Québec,[1] compared with 2.20% in the Atlantic Provinces, 1.30% in Ontario, and 1.41% in Western Canada.[2]

In 2001-2002, the share of GDP allocated to university education was 1.69% in Québec, compared with 1.42% in the rest of Canada. Higher spending in Québec is explained primarily by a per capita GDP that is lower than in the rest of Canada.

Between 1981 and 1989, this share of GDP was on a slight downward trend in Québec, Ontario and the Atlantic Provinces, while it increased in Western Canada. However, in the early 1990s the share of GDP allocated to university education increased significantly in Québec, whereas the increase was less marked in the rest of Canada.

The gap between Québec and the rest of Canada therefore widened considerably. Between 1986 and 1993, total spending for university education in Québec increased by 73%, compared with 56% in the rest of Canada. Québec's higher spending is explained primarily by strong growth in research at its universities,[3] but also by a more rapid increase in real funds allocated to education.

Between 1993 and 1999, the share of GDP allocated to university education dropped in Québec. It went from 1.98% in 1993-1994 to 1.68% in 1999-2000 as a result of budget cuts and a reduction in labour costs. In the rest of Canada, the share of GDP allocated to university education went down as well, although not as significantly.

Between 1999 and 2001, the share of GDP allocated to university education fluctuated slightly both in Québec and in the rest of Canada. In 2001-2002, investment in university education remained higher in Québec than in the rest of Canada (except in the Atlantic Provinces), owing mostly to the fact that the collective wealth, as measured by per capita GDP, was relatively lower in Québec than in the rest of Canada.

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1. In 2001-2002, Québec spent $3.9 billion of its $228.5-billion GDP on university education.
2. The data on universities presented here has not been adjusted to take into account the organizational differences in the education systems.
3. See Section 1.17.

When compared with the member countries of the Organisation for Economic Co-operation and Development (OECD), Québec ranks among the countries with the largest share of GDP allocated to postsecondary education in 1999.[4] This can be explained primarily by the fact that the cost of higher education is an estimated 30% higher in Québec than the OECD average.[5]

In addition, the school attendance rate in postsecondary education is higher in Québec than on average in OECD countries, and this factor contributed to the larger investment in education.

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4. The most recent year for which data is available on the share of GDP allocated to education for the OECD countries is 1999. For more information regarding comparisons with member countries of the OECD, see Marius Demers, "Educational Spending Relative to the GDP in 1997: A Comparison of Québec and the OECD Countries," *Education Statistics Bulletin* 20, (Québec: Ministère de l'Éducation, Direction des statistiques et des études quantitatives, November 2000). This document is available on the Internet at <http://www.meq.gouv.qc.ca>.
5. For the purpose of comparing the cost of higher education in Québec with the average in OECD countries, poorer countries (those with a lower per capita GDP) were excluded. Otherwise, the gap between the per-student cost of university education in Québec and the OECD average would be closer to 50%.

Table 1.13

Total spending allocated to university education[1] in relation to GDP: Québec and the other regions of Canada (%)

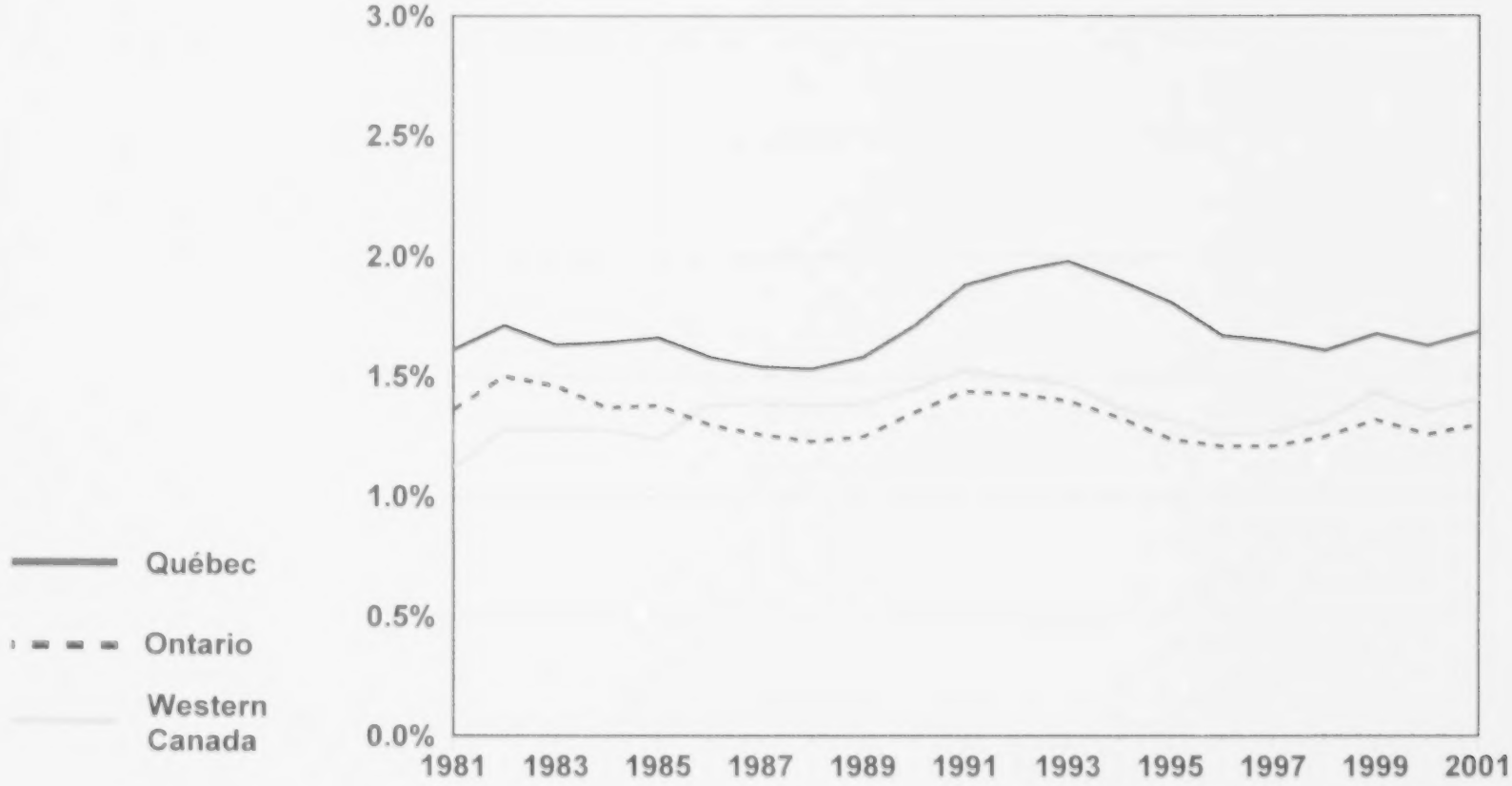
	1981-1982	1989-1990	1993-1994	1999-2000	2000-2001[e]	2001-2002[e]
Québec	**1.61**	**1.58**	**1.98**	**1.68**	**1.63**	**1.69**
Canada, excluding Québec	**1.34**	**1.40**	**1.51**	**1.44**	**1.37**	**1.42**
Atlantic Provinces	2.36	2.22	2.28	2.23	2.14	2.20
Ontario	1.36	1.25	1.40	1.32	1.26	1.30
Western Canada	1.12	1.39	1.47	1.44	1.36	1.41
Canada	**1.40**	**1.44**	**1.62**	**1.49**	**1.42**	**1.47**

e: Estimates

1. These figures include the operating and capital expenses for universities, the cost of student financial assistance, funded and sponsored research at the universities and the Ministère's administrative expenses (the portion attributable to university education). The calculation of the share of GDP allocated to university education is based on data from Statistics Canada.

Graph 1.13

Total spending allocated to university education in relation to the GDP: Québec, Ontario and Western Canada (%)



1.14 University Spending per Student[1]

In 2001-2002, spending per student by Québec universities (excluding sponsored research) was estimated at $11 916, compared with $12 143 in the Atlantic Provinces, $11 365 in Ontario and $12 730 in Western Canada.

In 2001-2002, spending per student by Québec universities was similar to the Canadian average.

Since there are differences in the way in which spending is accounted for between funds,[2] certain expenses are not included in the general operating fund: the purchase of furniture and equipment, equipment rental and maintenance, buildings, land and land improvements, other improvements and alterations, and financial expenses. Previous editions of the *Education Indicators* used a broader concept of spending (including general operating, trust, endowment and capital funds). Also, given the different approaches to student financial assistance in the different regions, amounts awarded by universities in the form of bursaries have also been omitted.[3]

Previous editions of the *Education Indicators* showed that during the first half of the 1980s, spending per student rose at a much slower pace in Québec, such that, in 1986-1987, it was lower in Québec than in the other regions of Canada. This slowdown in per-student spending in Québec can be explained by salary restrictions and budget cuts to Québec universities. However, in the second half of the 1980s until the mid-1990s, per-student spending rose more sharply in Québec than in the other regions of Canada, partly because of increased government subsidies per student, and partly because of increased revenues from tuition fees.

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1. The data on universities presented here has not been adjusted to take into account the organizational differences in the education systems. See Section 1.4.
2. Thus, part of the spending recorded in the capital fund in Québec appears in the general operating fund in Ontario. For example, Québec universities record most of their furniture and equipment expenses in the capital fund, while Ontario universities enter a large proportion of these expenses in the general operating fund.
3. In Québec, student financial assistance is for the most part managed by the government and not by universities. Universities spend little on student assistance. In Ontario, where tuition fees are considerably higher than in Québec (see Section 1.16), the universities are expected to give a portion back to the students in the form of bursaries. This explains why Ontario universities award so much more in the form of bursaries than Québec universities.

From the mid-1990s on, per-student spending in Québec decreased. This can be explained by budget cuts to universities and, more specifically, by a reduction in labour costs. In 1998-1999, spending per student was 6% lower in Québec than the average for the rest of Canada (see Table 1.14).

Between 1998-1999 and 2001-2002, per-student spending increased by 14% in Québec and by 8% in the rest of Canada. The more rapid growth in spending in Québec is primarily a result of a more substantial operating subsidy (reinvestment).

In 2000-2001, the most recent year for which data broken down by type of expenditure is available, spending per student by Québec universities was $198 higher than in Ontario. This gap can be explained primarily by higher per-student spending on teaching personnel,[4] administration and activities related to computers and communications in Québec. Conversely, there is less spending in Québec than in Ontario on other categories of personnel and on libraries and student services.

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4. See Section 1.15.

Table 1.14

University spending per student:[1] Québec and the other regions of Canada (in current dollars)

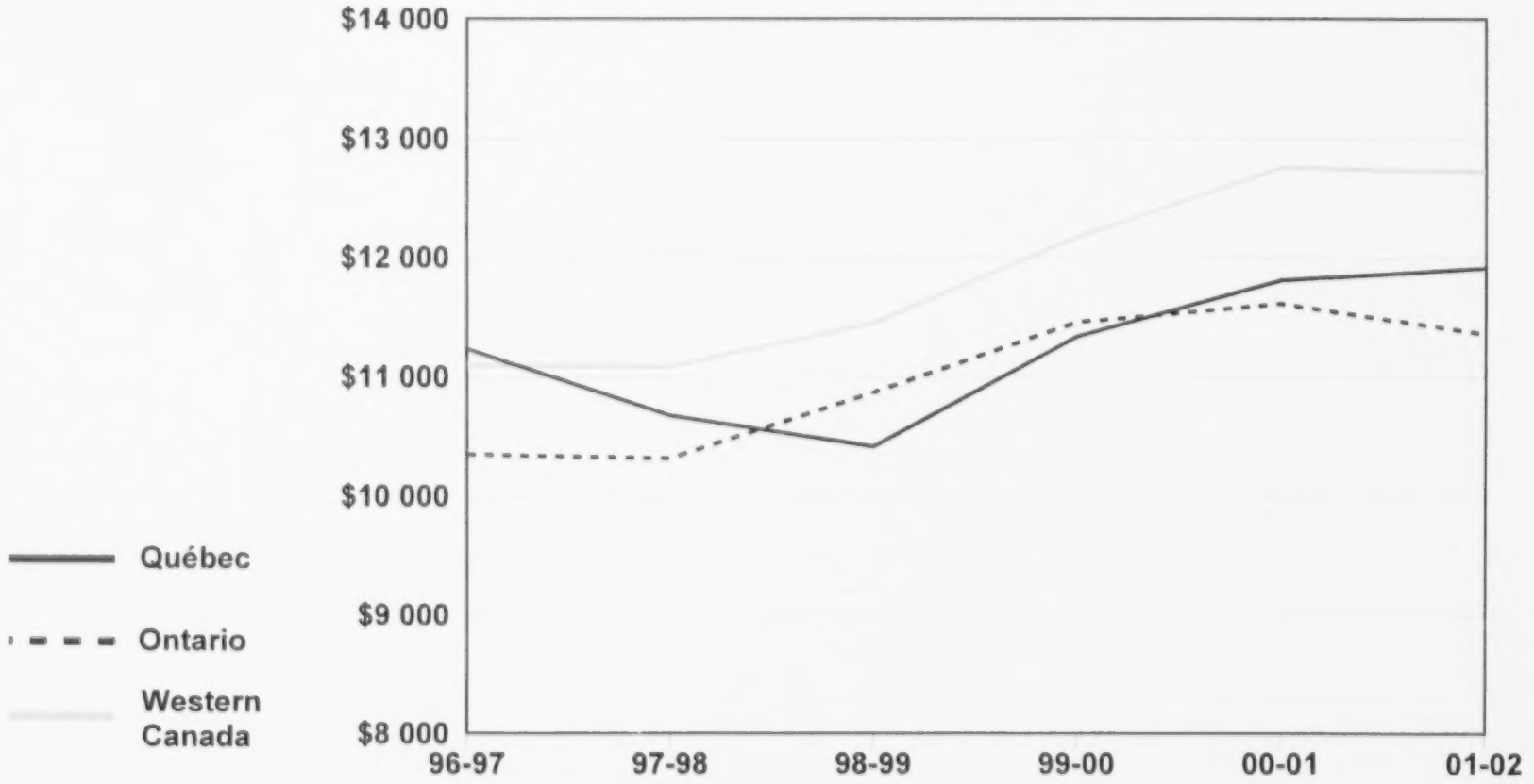
	1996-1997	1997-1998	1998-1999	1999-2000	2000-2001	2001-2002[e]
Québec	**11 229**	**10 675**	**10 415**	**11 334**	**11 811**	**11 916**
Canada, excluding Québec	**10 583**	**10 587**	**11 063**	**11 724**	**12 086**	**11 943**
Atlantic Provinces	10 191	10 356	10 824	11 597	12 158	12 143
Ontario	10 350	10 318	10 868	11 456	11 613	11 365
Western Canada	11 095	11 086	11 451	12 175	12 762	12 730
Canada	**10 744**	**10 609**	**10 903**	**11 627**	**12 018**	**11 938**

e: Estimates based on data obtained from Statistics Canada, the Association of Universities and Colleges of Canada (AUCC) and the Conference of Rectors and Principals of Quebec Universities (CREPUQ)

1. For the reasons explained in the text, certain expenses are not included in the general operating fund: the purchase of furniture and equipment, equipment rental and maintenance, buildings, land and land improvements, other improvements and alterations, financial expenses and bursaries. The basic data used to calculate per-student spending in universities was obtained from Statistics Canada, the Canadian Association of University Business Officers (CAUBO) and the AUCC. In addition, the calculation of per-student spending is based on a standard method for counting student enrollments in all provinces, as follows: part-time enrollments are divided by 3.5 to convert them into full-time equivalents, and are then added to the full-time enrollments.

Graph 1.14

University spending per student: Québec, Ontario and Western Canada (in current dollars)



1.15 Average Salary of University Research Professors

In 2000-2001, the average salary of university research professors in Québec was 4% lower than that of their counterparts in the rest of Canada.

Salary spending (including employee benefits) for all categories of personnel accounts for approximately 80% of university operating expenses in Québec and in the rest of Canada. Professors' salaries are the largest component of payroll expenditure. When the total payroll for professors is divided by the number of students expressed in full-time equivalents, the result is the cost of professors per student. In 2000-2001, this cost was lower in Québec ($4 806) than in the Atlantic Provinces ($5 059) and Western Canada ($4 921), but 4% higher than in Ontario ($4 602) and more or less equal to the Canadian average ($4 775).[1]

The total payroll considered in the calculation of per-student spending for professors includes deans, department heads, professors and lecturers, as well as amounts paid to all other personnel employed in teaching positions (as defined by Statistics Canada).[2] Of the factors that explain the differences observed in per-student spending for professors, two are particularly significant: the average number of students per professor, and the average salary of professors. The data currently available, however, is incomplete; therefore, this section will deal exclusively with the average salary of full-time research professors (see Table 1.15).[3]

In 2000-2001, the average salary of research professors in Québec ($77 925) was 11% higher than in the Atlantic Provinces ($70 067), but 6% lower than in Ontario ($83 234) and Western Canada ($83 290).

Graph 1.15 provides a comparison of the changes in the average salary of research professors in Québec, Ontario and Western Canada between 1981 and 2000. It reveals that in the 1980s, the average salary increased less rapidly in

1. The calculation of per-student spending for professors is based on a standard method for counting student enrollments in all the provinces, as follows: part-time enrollments are divided by 3.5 to convert them into full-time equivalents, and are then added to the full-time enrollments.
2. Employee benefits are not included in the total payroll used for this calculation.
3. Average salary includes basic salary as well as additional fees paid for administrative functions.

Québec than in Ontario or Western Canada. In the 1990s, the average salary of Québec research professors also rose slightly less than elsewhere in Canada, although it is important to note that the inflation rate was also lower in Québec.

It should also be noted that, although the average salary of research professors in Québec is lower than in Ontario, the per-student cost of professors is still higher in Québec. This means that there are other, more expensive, factors in Québec, and it would be important to be able to identify them.[4] For now, there is no comparable data available on factors such as the average teaching time of professors, the average number of students per class and the number of classes taught by lecturers.

Research professors' time is divided up among the following activities: teaching, research, supervision of student research, internal services, services to communities outside the university and professional development. Teaching time can further be broken down into course preparation, actual teaching time in the classroom, student support and supervision, the evaluation of learning and everyday management activities.

The organization of professors' work varies from university to university, and the choices made by each university have an impact on per-student spending. Thus, one important variable is the average number of course credits awarded by regular full-time research professors in any given year.

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4. According to the Council of Ontario Universities, the average number of students per professor in Québec is lower than in Ontario (see *Ontario Universities – 2002; Resource Document*, September 2002, Tables 8.5 and 8.6).

Table 1.15

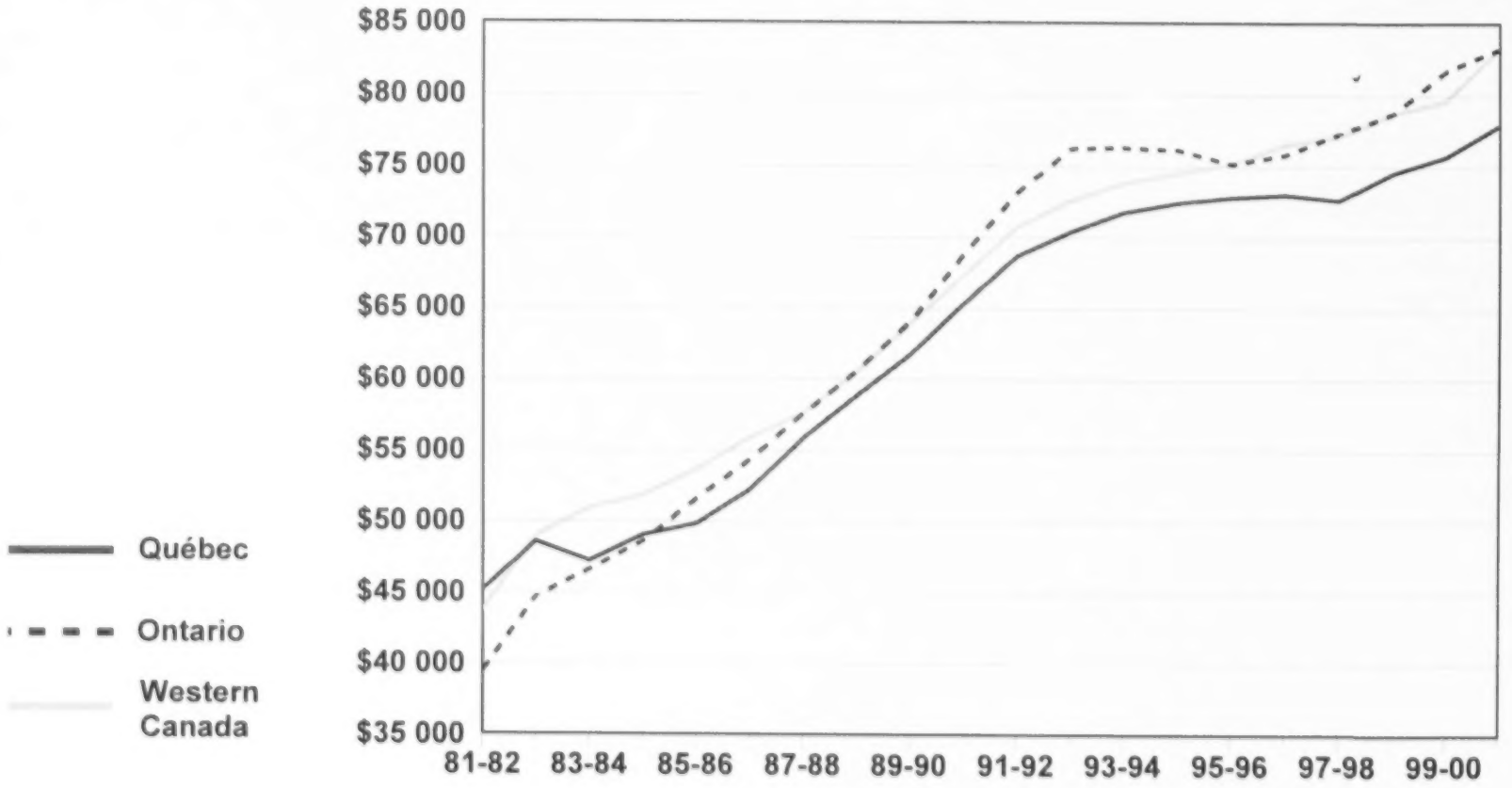
Average salary of university research professors: Québec and the other regions of Canada (in current dollars)

	1990-1991	1993-1994	1996-1997	1998-1999	1999-2000	2000-2001[e]
Québec	**65 284**	**71 766**	**73 022**	**74 566**	**75 736**	**77 925**
Canada, excluding Québec	**66 817**	**73 475**	**74 260**	**76 838**	**78 824**	**81 159**
Atlantic Provinces	59 826	63 764	64 586	67 001	68 707	70 067
Ontario	68 763	76 318	75 828	78 704	81 721	83 234
Western Canada	67 267	73 864	76 525	78 729	79 657	83 290
Canada	**66 464**	**73 050**	**73 943**	**76 284**	**78 076**	**80 375**

e: Estimates

Graph 1.15

Average salary of research professors in universities: Québec, Ontario and Western Canada (in current dollars)



1.16 Student Financial Assistance and Tuition Fees

The amount of assistance in the form of bursaries awarded in Québec has increased significantly since 2000-2001.

In Québec, financial assistance is available to students in full-time postsecondary education and in secondary-level vocational education programs. The loans and bursaries awarded under Québec's Student Financial Assistance Program are intended to supplement the contribution of the student and, where applicable, of his or her parents, sponsor or spouse: responsibility for the cost of education lies with them first and foremost. Government assistance covers the difference between the allowable expenses and the contribution of the student and, where applicable, of his or her parents, sponsor or spouse.

In 2001-2002, of those persons eligible for financial assistance, 18.8% of students in secondary vocational education, 24.0% of college students and 36.1% of university students received assistance. It should be noted that the financial assistance awarded to students in secondary vocational education falls under a program implemented in 1994-1995. A total of 127 768 students benefited from the Student Financial Assistance Program. Of these, 60 312 received only a loan, 66 892 received a loan and a bursary, and 564 received only a bursary. A total of $338.6 million was granted in the form of loans and $254.0 million, in bursaries.

In 2001-2002, of the university students who received financial assistance, 43.4% obtained only a loan, which averaged $2 638, whereas 56.6% obtained a loan and a bursary totalling an average of $7 379. Those who received a loan and a bursary obtained on average slightly less than half of the assistance in the form of a bursary.

A look at the historical data on the breakdown of financial assistance awarded to Québec students attending university in 1984-1985 shows that loans made up 53.6% of the total assistance awarded, and bursaries, 46.4%. In the years that followed, the portion of assistance granted in the form of loans increased and the portion awarded in bursaries decreased, such that, in 1999-2000, the corresponding percentages were 68.0% and 32.0%, respectively. However, in the following years, there was a reversal in this trend. In 2001-2002, loans made up only 53.6% of the total assistance awarded and bursaries, 46.4% (as in 1984-1985). The increase in the portion of bursaries is related to the 25% reduction in the maximum amount of loans awarded due to the funding obtained as part of the Millennium Bursaries.

In 2001-2002, upon completion of their undergraduate studies, Québec students who had received loans owed on average $10 814. The average debt for graduate studies was $14 562 and for postgraduate studies, $18 517.

Student loans contracted for college and undergraduate studies averaged $14 009 in 2001-2002; for college through to graduate studies, $20 792; and for college to postgraduate studies, $28 214.

Although these debt levels are relatively high, they are lower in Québec than elsewhere in Canada. This is partly explained by the fact that, on average, Québec awards more bursaries than the other provinces and that tuition fees in Québec universities are the lowest in Canada.

Tuition fees in Québec universities in 2002-2003 were a mere 40% of the amount charged in Ontario, having remained frozen for a number of years. Although there were major increases at the beginning of the 1990s, tuition fees have remained approximately at the same level in Québec since 1993-1994, whereas they have continued to climb in the other regions of Canada. The gap between Québec and the rest of Canada has once again begun to widen, and in 2002-2003, tuition fees in Ontario ($4 634) were 2.5 times higher than in Québec ($1 851).

Table 1.16

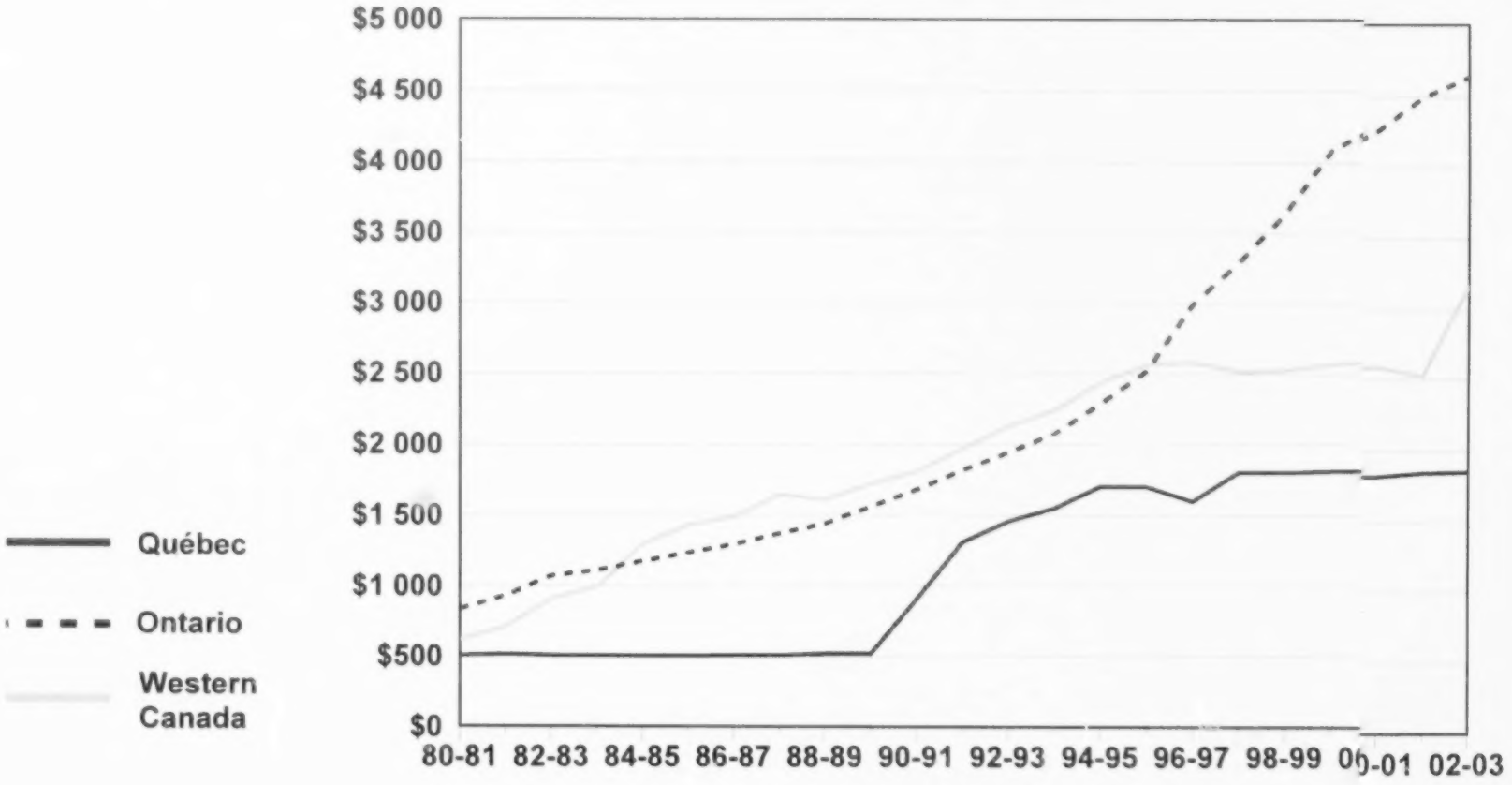
Average tuition fees for full-time undergraduate university students: Québec and the other regions of Canada (in current dollars)

	1980-1981	1985-1986	1990-1991	1995-1996	2000-2001	2002-2003
Newfoundland	639	1 006	1 344	2 312	3 373	2 729
Prince Edward Island	876	1 371	1 874	2 846	3 499	3 891
Nova Scotia	907	1 486	1 941	3 249	4 631	5 214
New Brunswick	830	1 375	1 925	2 534	3 585	4 186
Québec[1]	**503**	**503**	**904**	**1 703**	**1 818**	**1 851**
Ontario	832	1 235	1 680	2 518	4 256	4 634
Manitoba	660	978	1 512	2 520	3 219	3 248
Saskatchewan	713	1 062	1 545	2 680	3 668	4 286
Alberta	635	885	1 286	2 744	3 907	4 165
British Columbia	617	1 431	1 808	2 563	2 592	3 165
Canada	**702**	**1 019**	**1 464**	**2 384**	**3 447**	**3 738**

1. In Québec, as of the fall of 1997, Canadian students not residing in Québec must pay an additional amount that has been taken into account in the calculation of the average tuition fees (Statistics Canada data). This explains the increase in tuition fees in recent years, despite the freeze on tuition for Québec residents.

Graph 1.16

Average tuition fees for full-time undergraduate university students: Québec, Ontario and Western Canada (in current dollars)



1.17 Funded and Sponsored Research in Universities

After a significant increase in the early 1990s, the funding allocated to university research dropped until 1997-1998. Since then, it has risen, and stood at $875 million in 2000-2001.

The amount of funding through grants and research contracts allocated to universities has increased significantly, rising from $456.2 million in 1990-1991 to $874.5 million in 2000-2001. This represents an average annual increase of 6.7%. Funding per research professor rose from $54 654 to $105 923, for an average annual increase of 6.8%. In comparison, the consumer price index (CPI) increased by 1.7% during this period.

The amounts allocated to university research increased in three stages during the period in question. From 1990-1991 to 1992-1993, the amounts allocated to university research increased on average 12.8% per year, mainly because of the Québec government's tax incentives for research and development. In particular, research contracts awarded by businesses increased during this period. After the disappearance of these tax incentives, contributions decreased by an average of 1.6% per year between 1994-1995 and 1997-1998. Finally, the spectacular upward trend resumed from 1997-1998 to 2000-2001 (9.7% per year on average), mainly because of subsidies awarded by the Canadian Foundation for Innovation (CFI) and its partners.

From 1992-1993 to 1997-1998, the contribution of the Canadian government declined by 1.6% per year on average, at the same pace as total contributions. For the same period, the Québec government contribution increased by 2.5%. During this time, contributions from the Canadian private sector dropped by 6.9% per year on average with the disappearance of tax incentives. The upward trend was marked in 1998-1999 for all sources of funding, with the largest increase for the federal government (14.4% on average) and the smallest increase for the Canadian private sector (2.2%).

In 2000-2001, the Canadian government' contribution constituted 39.3% of grants and research contracts allocated to universities. The share from the Québec government was 23.9%, from the Canadian private sector, 21.8%, and from other sources, 15.0%.

In 1999-2000, 81% of grants and research contracts were awarded in the fields of health sciences (38.2%), pure sciences (26%) and applied sciences (16.7%). Next came social sciences (7.7%), business administration (2.6%) and education (1.7%).

Health sciences received 31.4% of its grants and research contracts from the Canadian private sector and 32.9% from the Canadian government. The federal government also funded 46.9% of the research in pure sciences and 45.3% in applied sciences.

Funding for research in education varied between $8.8 and $14.6 million from 1990-1991 to 2000-2001, reaching a high in 1994-1995 of $15.1 million. Since 1997-1998, funding has grown by an average of 10.2%.

Table 1.17

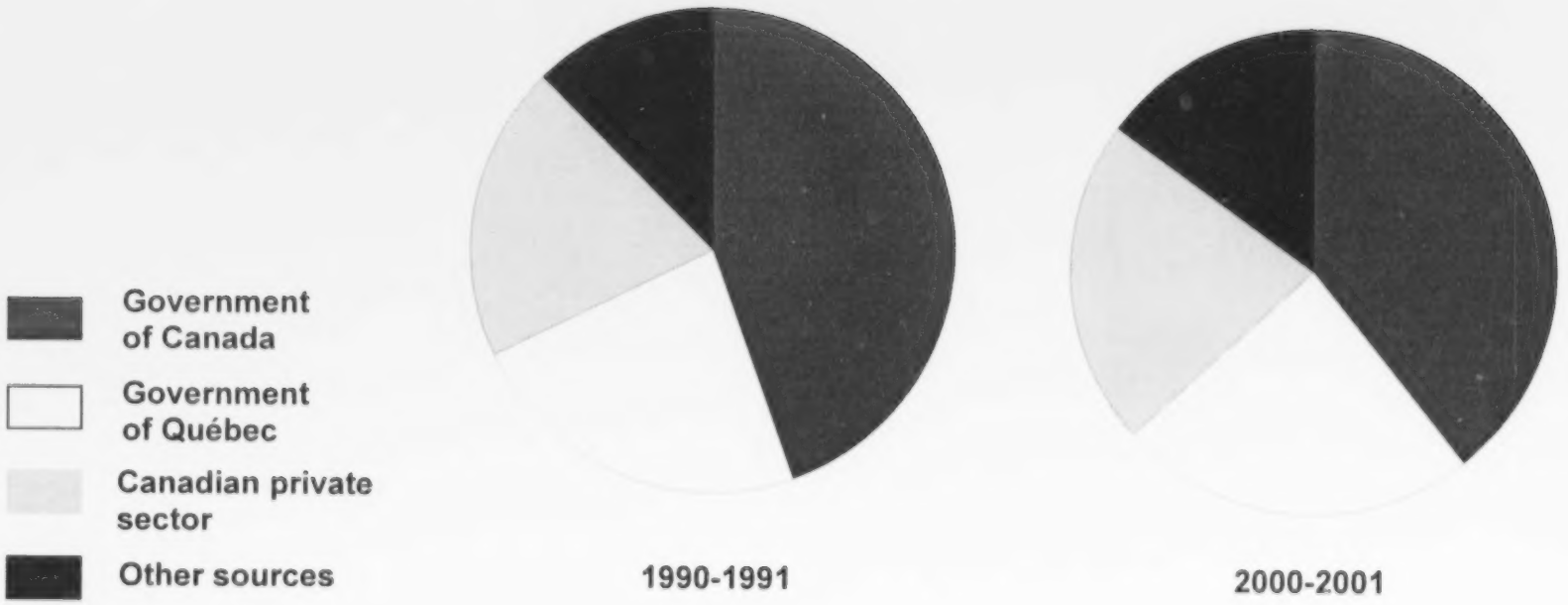
Funded and sponsored research according to source of funding and per research professor

	1990-1991	1992-1993	1994-1995	1997-1998	1999-2000	2000-2001
Grants and research contracts (in millions of dollars),[1] by source						
Government of Canada	202.8	229.0	234.3	211.6	275.4	343.9
Government of Québec	106.4	125.7	141.5	142.5	166.6	208.6
Canadian private sector	90.3	234.4	132.1	163.8	180.5	190.8
Other sources	56.7	65.9	78.7	87.3	99.7	131.2
Total	456.2	655.0	586.6	604.5	722.1	874.5
Number of research professors[2]	**8 347**	**8 860**	**8 906**	**8 144**	**8 005**	**8 256**
Amount per research professor ($)	**54 654**	**73 924**	**65 866**	**74 225**	**90 209**	**105 923**

1. This refers to all research receiving direct assistance (grants, contracts, sponsorships, etc.) from either the university itself or outside organizations. Included are research projects which are conducted under the supervision of university research professors and for which funds have been put into specific accounts managed by the financial services or accounting department of the university or of a hospital or university-affiliated centre (as defined by the Système d'information sur la recherche universitaire [SIRU]).
2. This refers to career professors who occupy permanent positions in Québec universities, regardless of whether they are currently involved full-time in teaching-related activities or on sabbatical or career development leave. They may also assume certain administrative tasks. For example, department heads, deans and assistant deans often continue to be active in teaching or research. However, our definition of research professor excludes administrators of services (library directors, registrars, etc.) and senior administrators (rectors and vice-rectors). (Source: Ministère de l'Éducation and Conference of Rectors and Principals of Quebec Universities, *Enquête sur le personnel enseignant*.)

Graph 1.17

Distribution of grants and research contracts, by source of funding



2.1 School Life Expectancy

A child who began elementary school in 2001-2002 can expect to spend 15.4 years in the education system.[1] Since 1988-1989, 0.7 years of schooling have been added for male students, and 1.1 years for female students. School life expectancy has not improved from the 15.7 years observed in 1993-1994. For male students, it has even decreased by a half year since then, standing now at 14.9 years. In 2000-2001, the value observed among young people in Québec (15.3 years) was 0.3 years less than the school life expectancy observed in France for the same period.[2]

From elementary to university education, in 2001-2002, school-aged Quebeckers could expect to stay in school for an average of 15.4 years.

A breakdown by level of education reveals that all increases in the past 14 years are attributable to either adult education or postsecondary education. More than half of the additional schooling is a result of college and university studies. At the elementary and secondary levels, schooling rose by 0.32 years, resulting from an increase of 0.56 years in the adult sector and a drop of 0.24 years in the youth sector.

At the elementary and secondary levels, the actual duration of schooling more or less corresponds to the projected length of studies. This is not surprising given that enrollment at these levels of education is virtually universal and compulsory until almost the end of secondary school. The reason why the average duration of schooling is less than the length of programs at the college and university levels is primarily because not all students go on to postsecondary education.

School life expectancy does not necessarily correspond to the number of years of study begun and successfully completed because grades repeated are included in the average duration. The very slight decline since 1992-1993 in duration of schooling at the elementary and secondary levels can be explained simply by the decrease in the number of

1. Technically, school life expectancy for a school year is equal to the sum of the schooling rates (or school attendance rates) for full-time studies (or the equivalent) per year of age. A schooling rate is equivalent to the average number of years of schooling per person. The sum of the rates per age indicates the hypothetical duration of studies for a child who begins elementary school and who, throughout his or her progression through school, is in the schooling situation observed for a given year at various ages.
2. Ministère de l'Éducation nationale, Direction de la programmation et du développement, *L'état de l'École*, Paris, Vol. 12, October 2002.

years that are repeated (see Section 2.7). At the elementary and secondary levels, male students attend school slightly longer than female students (11.9 and 11.8 years, respectively) precisely because they have more difficulty. At the college and university levels, women tend to stay in school longer because more of them enroll in postsecondary education than men (see Sections 2.8 and 2.10). Women attend postsecondary school for an average of 4.1 years, compared with 3.0 years for men.

Table 2.1

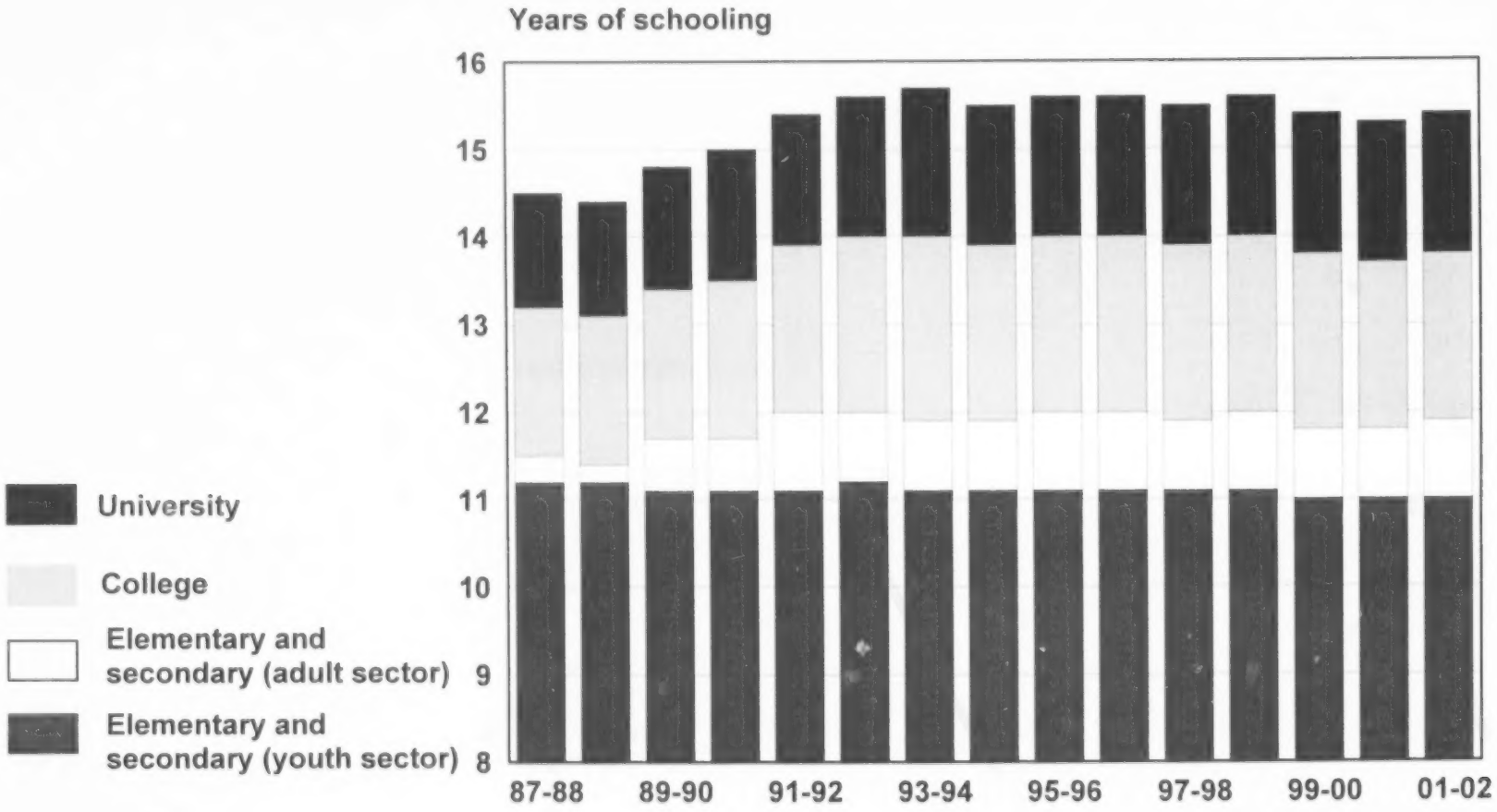
School life expectancy for a child entering elementary school, by gender and level of education (in years)

	1987-1988	1988-1989	1993-1994	1998-1999	2000-2001	2001-2002
All levels of education by gender						
Male	N/A	14.2	15.4	15.1	14.9	14.9
Female	N/A	14.8	16.0	15.8	15.8	15.9
Total	**14.5**	**14.5**	**15.7**	**15.5**	**15.3**	**15.4**
Both genders according to level of education						
Elementary (youth sector)	6.14	6.16	6.12	6.07	6.07	6.07
Secondary (youth sector)	5.09	5.03	5.01	5.01	4.94	4.93
Elementary and secondary (adult sector)	0.30	0.23	0.84	0.87	0.83	0.86
College	1.74	1.74	2.06	1.99	1.94	1.91
University	1.28	1.34	1.64	1.52	1.55	1.60[e]

e: Estimate
N/A: Data not available

Graph 2.1

School life expectancy for a child entering elementary school (in years)



2.2 Enrollment in Preschool Education

Enrollment in kindergarten for 5-year-olds[1] has varied between 97% and 99% for a number of years. There is no difference between the enrollment of boys and girls in either kindergarten for 5-year-olds or kindergarten for 4-year-olds. In the past, enrollment in kindergarten for 4-year-olds varied between 6% and 9%. It has been significantly higher since 1994-1995 because children in Passe-Partout play groups are now included, and it stood at 19.2% in 2001-2002.

In 2001-2002, 96.7% of all eligible children attended kindergarten for 5-year-olds, almost all of them on a full-time basis.

For a long time, children enrolled in part-time kindergarten for 5-year-olds[2] accounted for approximately 87% of all students in kindergarten, and this rate was the same for boys as for girls. In 1997-1998, with the kindergarten reform, the situation was completely reversed as almost all boys and girls in kindergarten for 5-year-olds started to attend on a full-time basis.

Around the world, daycare centres, kindergartens, regular schools and families participate to varying degrees in the education of young children. In Québec, a relatively large portion of educational activities are entrusted to daycare centres, while the official education system becomes involved later in the child's life. Thus, in Québec, 5-year-olds are about as likely to attend school—kindergarten or elementary school—as children in member countries of the

1. This refers to the number of children in kindergarten for 5-year-olds (regardless of their age) in proportion to the population of 5-year-olds, or 4-year-olds in the case of kindergarten for 4-year-olds. Very few children who are not 5 years of age on September 30 are enrolled in kindergarten for 5-year-olds, and even fewer children in kindergarten for 4-year-olds are not 4 years of age. Variations in the estimates of the population aged 4 or 5 may affect the calculation of these rates, probably more so than any other factor.
2. In kindergarten for 5-year-olds, part-time attendance means five half-days per week and full-time attendance, five full days per week. In kindergarten for 4-year-olds, part-time attendance means one to four half-days per week and full-time attendance, five half-days per week.

Organisation for Economic Co-operation and Development (OECD).[3] In 2000-2001, virtually all countries had universal access to school for 5-year-olds (Sweden was one exception). On the other hand, with respect to educational activities for 4-year-olds, Québec is far behind those countries in which the enrollment of 4-year-olds is almost identical to that of 5-year-olds. Similarly, in Québec and the rest of Canada, 3-year-olds do not attend school; this is a rare exception among OECD countries.

Children with handicaps or with learning or adjustment difficulties account for 1.5% of students in kindergarten for 5-year-olds. For girls, the proportion was 1.0% and it was almost double (2.0%) for boys.

3. The OECD calculates net enrollment rates, that is, the proportion of children of a given age who attend kindergarten or elementary school. These two levels are combined, since there are major differences among countries. The net enrollment rate does not take into account whether children attend school part-time or full-time, or their hours or days of attendance. Here too, major differences can be seen among countries.

Table 2.2

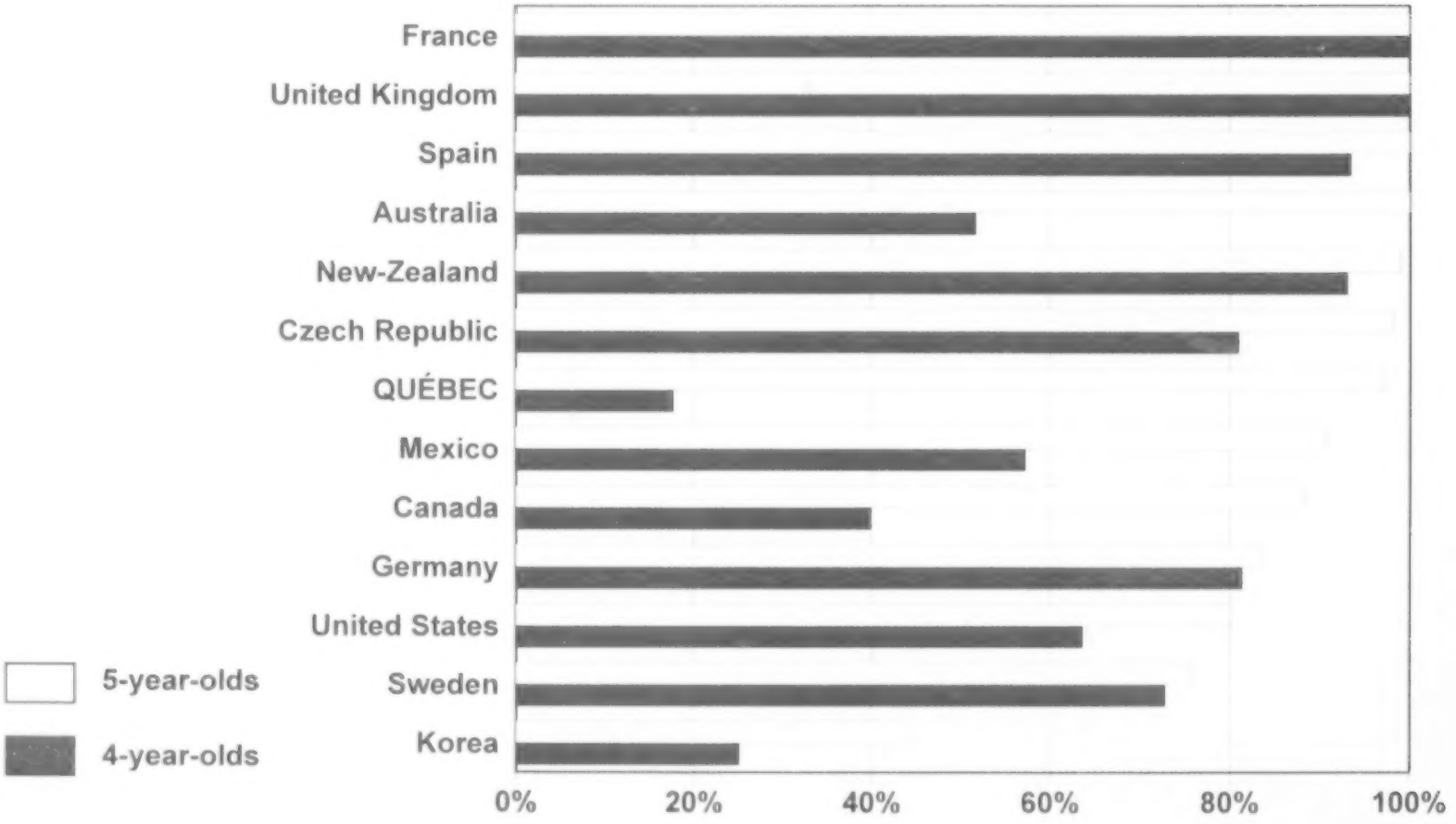
Proportion of children enrolled in kindergarten for 4-year-olds and for 5-year-olds (%)

	1982-1983	1992-1993	1997-1998	1999-2000	2000-2001	2001-2002
Kindergarten for 4-year-olds	**8.0**	**9.2**	**17.4**	**17.1**	**16.7**	**19.2**
Passe-Partout play groups	—	—	8.5	7.6	7.4	10.8
Other categories	—	—	9.0	9.5	9.4	8.4
Kindergarten for 5-year-olds	**97.4**	**96.7**	**98.4**	**98.5**	**98.0**	**96.7**
Full-time[1]	—	9.2	97.8	98.3	98.0	96.6
Part-time[2]	—	87.6	0.6	0.2	0.0	0.0

—: Not applicable
1. Full-time: five full days
2. Part-time: five half-days

Graph 2.2

Net enrollment rates for 4-year-olds and 5-year-olds: Québec, Canada and other countries, 2000-2001 (%)



2.3 Enrollment in Secondary IV and V, General Education–Youth Sector

Enrollment in Secondary V stood at 74.1% in 2001-2002, lower than in 2000-2001. This was to be expected, given the low enrollment in Secondary IV the previous year. However, in 2001-2002, enrollment in Secondary IV rose to 84.4%, which means that enrollment in Secondary V could increase slightly in 2002-2003.

In 2001-2002, in general education in the youth sector, enrollment in Secondary V was 74.1%, more than 3% lower than in 2000-2001.

From a more historical perspective, Graph 2.3 shows that enrollment in Secondary IV and V increased appreciably in the 1980s. This trend can be explained by the fact that admission to vocational education was delayed to ensure that students spent an extra year in general education. On the other hand, the drop observed in 1985-1986 (in Secondary IV) and in 1986-1987 (in Secondary V) was due to the raising of the pass mark.[1] There was a temporary decline in student retention, but it was not long before an upward trend took hold once again.

Enrollment in Secondary I is virtually universal;[2] it was 98% in 2001-2002. In 2001-2002, 97% of young people were enrolled in Secondary II, and 92% in Secondary III.

Differences in enrollment between female and male students appear in Secondary III, where female students are ahead of the male students by 3 percentage points. The gap widens in Secondary IV to 8 percentage points in favour of the female students, and to 11 percentage points in Secondary V.

1. The new, higher pass mark was applied to students entering secondary school in 1982-1983.
2. Some young people are not educated in the official education system. They may receive their schooling in reception centres, in schools that are not legally recognized or at home.

Table 2.3

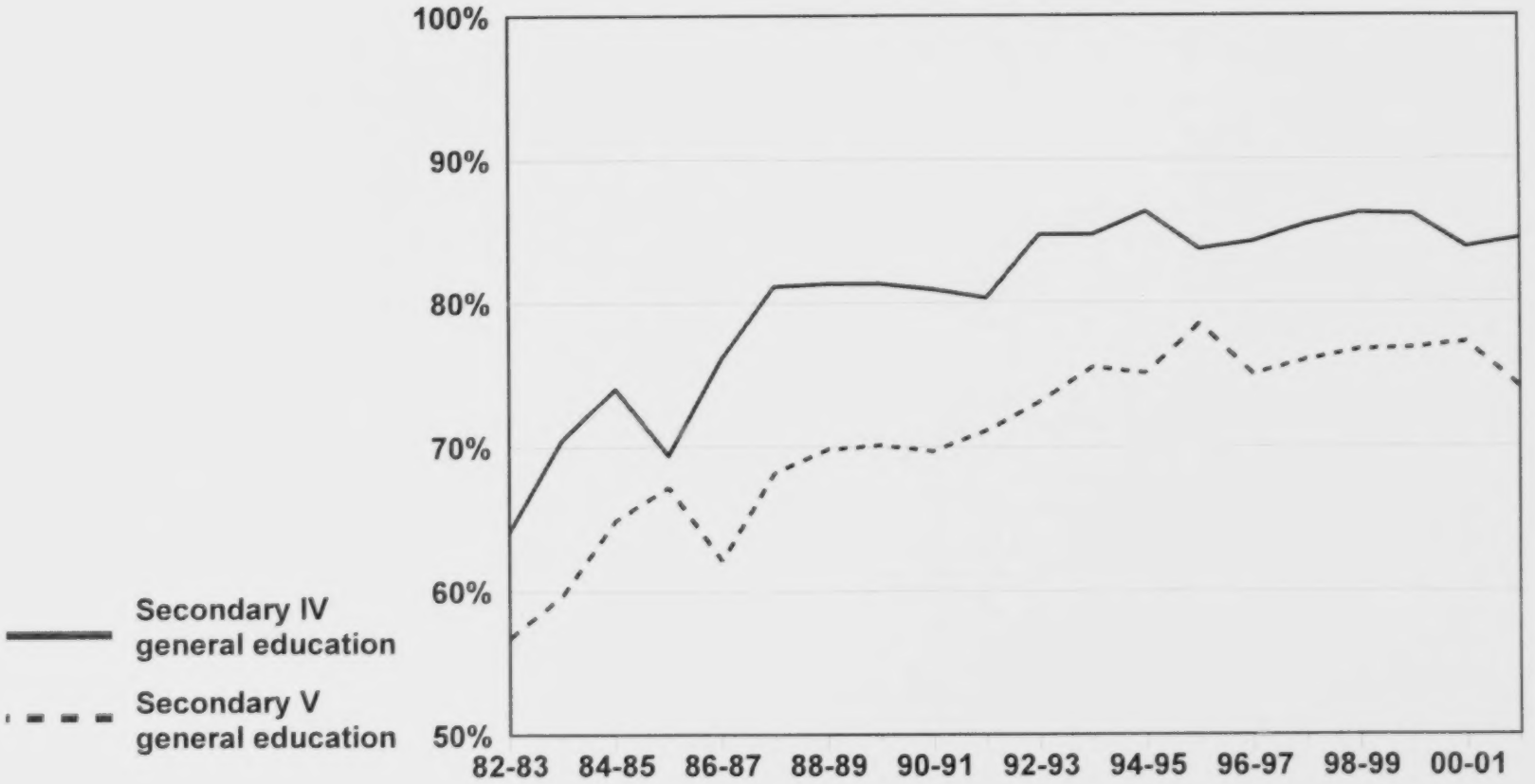
Proportion of young people enrolling in Secondary IV and V in general education in the public and private systems combined, by gender (%)

	1982-1983	1992-1993	1997-1998	1999-2000	2000-2001	2001-2002
Secondary IV	**64.1**	**84.7**	**85.4**	**86.1**	**83.8**	**84.4**
Male	59.9	81.6	82.0	83.0	80.4	80.4
Female	68.6	87.9	89.1	89.5	87.5	88.5
Secondary V	**56.7**	**73.1**	**76.0**	**76.8**	**77.2**	**74.1**
Male	53.6	68.4	70.4	71.4	71.6	68.6
Female	60.0	78.2	81.9	82.5	83.2	79.8

Note: Students enrolled in vocational education are not included.

Graph 2.3

Proportion of young people enrolling in Secondary IV and V in general education in the public and private systems combined (%)



2.4 Enrollment in Secondary Vocational Education–Youth and Adult Sectors

In 2001-2002, 17.0% of young people under the age of 20, 58% of whom already held an SSD, enrolled in vocational education.

The proportion of students under the age of 20 enrolling in vocational education programs was 17.0% in 2001-2002, an increase of 16.2% over 1998-1999. Since 1998-1999, enrollment of students already holding a Secondary School Diploma (SSD) has been relatively stable, and stood at 9.9% in 2001-2002.

Since short vocational programs have been phased out, most students who would normally have opted for these programs in the past are now enrolled in individualized paths for learning or, more likely still, in work skills and life skills education programs, which are a part of general education. Enrollment of students without diplomas was 7.1% in 2001-2002 and represented only 42% of all people under the age of 20 enrolling in a vocational education program. This situation has been relatively stable in the past few years.

Vocational education programs attract more male than female students. Thus, in 2001-2002, 20.9% of male students opted for this path, compared with 12.9% of female students. This situation applies equally to students who had a diploma and to those who did not. This is the opposite of what has been occurring in general education in the youth sector (see Section 2.3), where female students tend to stay in school longer. Male students, who are more likely to enroll in vocational education programs than female students, more often leave general education and the youth sector.

Table 2.4

Enrollment in vocational education of students under the age of 20, youth and adult sectors combined (%)

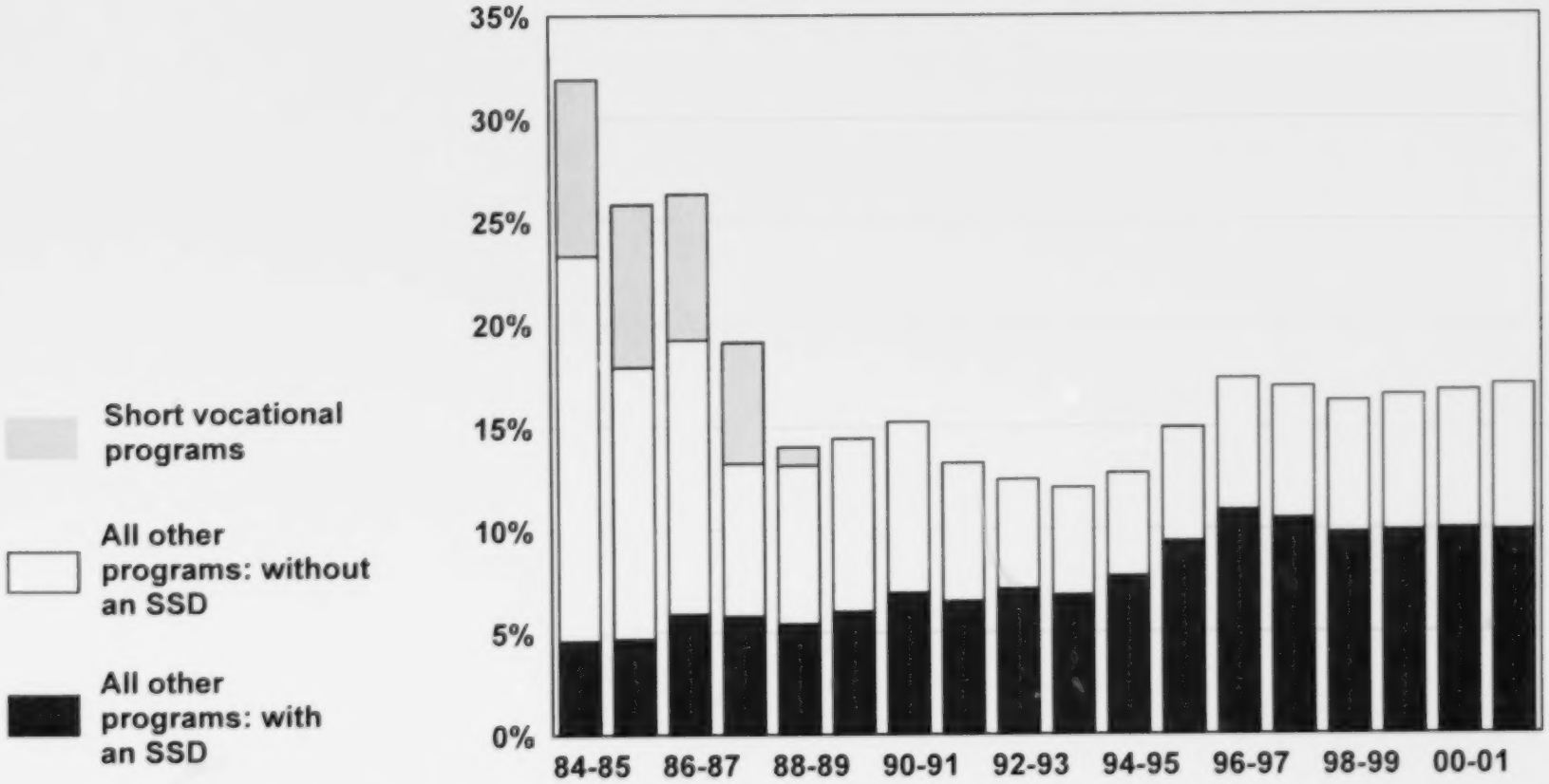
	1984-1985	1994-1995	1998-1999	1999-2000	2000-2001	2001-2002
TOTAL						
Short vocational programs[1]	8.6	–	–	–	–	–
All other programs	**23.3**	**12.8**	**16.2**	**16.5**	**16.7**	**17.0**
Without an SSD	18.7	5.0	6.4	6.6	6.7	7.1
With an SSD	4.6	7.7	9.8	9.9	10.0	9.9
MALE						
Short vocational programs[1]	11.9	–	–	–	–	–
All other programs	**21.8**	**15.0**	**19.1**	**19.7**	**20.4**	**20.9**
Without an SSD	18.2	6.6	8.6	8.9	9.1	9.7
With an SSD	3.6	8.4	10.5	10.8	11.3	11.2
FEMALE						
Short vocational programs[1]	5.2	–	–	–	–	–
All other programs	**24.8**	**10.4**	**13.2**	**13.1**	**12.8**	**12.9**
Without an SSD	19.1	3.4	4.1	4.2	4.2	4.4
With an SSD	5.7	7.0	9.1	8.9	8.6	8.5

–: Not applicable

1. Most young students who enroll in short vocational programs do not have a diploma.

Graph 2.4

Enrollment in vocational education of students under the age of 20, youth and adult sectors combined (%)



2.5 Enrollment in Secondary General Education–Adult Sector

Students who do not obtain a secondary school diploma in the youth sector are not all dropouts. Many of them choose to pursue their studies in the adult sector.

In 2001-2002, 13.7% of students under 20 years of age transferred directly from the youth sector to the adult sector.

In 2001-2002, 13.7% of school-aged youth under 20 went directly from the youth sector to the adult sector in general education without interrupting their studies. In 1984-1985, the rate was only 1.3%; there has therefore been a tenfold increase. In view of this, the relatively low rate of 5.0% observed in 1992-1993 can be attributed to the changes made in the funding of educational activities for adult students in general education; at the time, this funding was part of a restricted envelope.[1] The increase observed in 1993-1994 (9%) was surely due in part to the fact that the envelope was once again opened for students 16 to 18 years of age.

An analysis of the proportion of students who, after interrupting their studies, return to school in general education in the adult sector reveals that the number of students aged 15 to 19 who returned to the adult sector was higher, until 1986-1987, than the number of students who transferred directly from the youth sector. Since then, however, the latter path has grown in popularity, and in 2001-2002, accounted for more than three quarters of all new enrollments of students under 20 years of age.

The adult sector does not limit its services to providing students leaving the youth sector with the opportunity to earn their diploma through an alternative system. Adult education is also open to those who already have a secondary school diploma but wish to add to their education. And even among students without a diploma who enroll in the adult sector, some simply wish to meet a short-term need, such as acquiring the knowledge or skills taught in a specific course.

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1. As a result, the school boards had to encourage students to stay in the youth sector (whose envelope is always open), since funding for the adult sector was reduced in 1992-1993.

Table 2.5

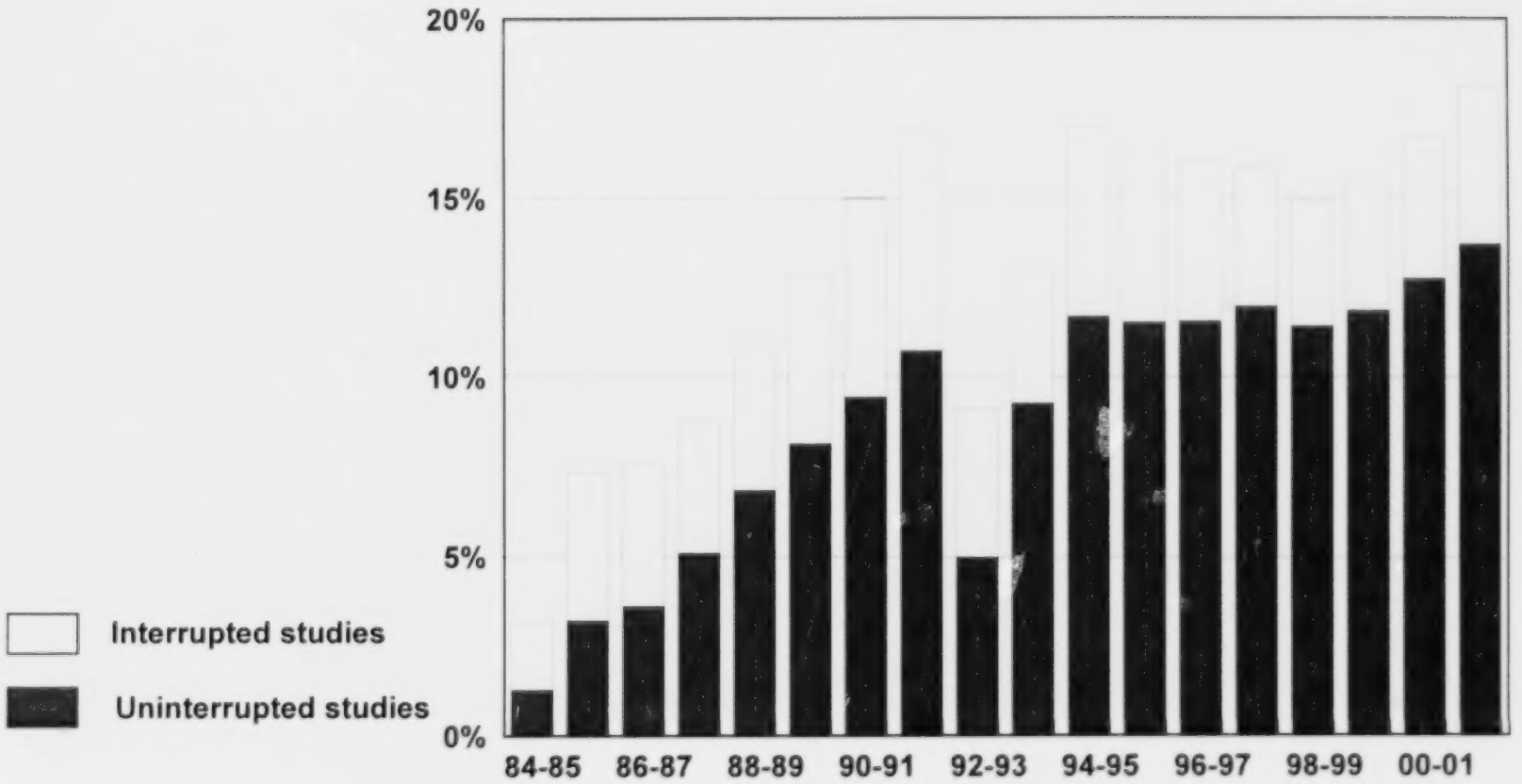
Enrollment in general education in the adult sector of students under the age of 20 without a secondary school diploma, by gender (%)

	1984-1985	1994-1995	1998-1999	1999-2000	2000-2001	2001-2002
Total	**3.2**	**17.0**	**14.9**	**15.5**	**16.7**	**18.1**
Uninterrupted studies[1] (directly from the youth sector)	1.3	11.7	11.4	11.9	12.7	13.7
Interrupted studies	2.0	5.3	3.5	3.6	4.0	4.4
Male	**3.3**	**19.3**	**17.2**	**17.8**	**19.0**	**20.6**
Uninterrupted studies[1] (directly from the youth sector)	1.4	13.6	13.3	13.7	14.6	15.7
Interrupted studies	1.9	5.7	3.8	4.1	4.4	4.9
Female	**3.1**	**14.5**	**12.5**	**13.0**	**14.2**	**15.6**
Uninterrupted studies[1] (directly from the youth sector)	1.1	9.7	9.4	9.9	10.8	11.6
Interrupted studies	2.0	4.8	3.2	3.1	3.5	3.9

1. Refers to students enrolled in the youth sector on September 30 of the preceding year.

Graph 2.5

Enrollment in general education in the adult sector of students under the age of 20 without a secondary school diploma (%)



2.6 Dropping Out of Secondary School

This section measures both official successful completion (graduation) and school attendance of those who have not yet received a diploma. The dropout rate is defined as the proportion of the population that does not attend school and has not obtained a secondary school diploma.

In 2001, 18.8% of 19-year-olds were without a secondary school diploma and were not attending school. This proportion was 40.6% in 1979.

The dropout rate by age is obtained by measuring the proportion of the population with a secondary school diploma[1] by age, and the proportion without a diploma but still in school.[2] The two measurements are added together and deducted from 100.

Graph 2.6 shows the downward trend of the dropout rate since 1979. The increase observed in the 1980s is due to the raising of the pass mark, which made it more difficult to obtain a secondary school diploma (see Section 5.2). Results in recent years have been relatively stable.

The dropout rate in 2001 was 19.9% for 20-year-olds, 22.7% for 25-year-olds and 25.4% for 30-year-olds. Generally speaking, this indicates that the dropout rate in the youth sector is lower than for previous generations. An analysis of the data for a given age reveals that the dropout rate has declined considerably in the past 20 years: the rate for 17-year-olds went from 26.1% in 1979 to 9.8% in 2001, and the rate for 19-year-olds dropped from 40.6% to 18.8% during the same period.

---

1. The diplomas considered here are the Secondary School Diploma (SSD–including the Short Vocational Diploma and the Long Vocational Diploma), the Secondary School Vocational Certificate (SSVC), the Diploma of Vocational Studies (DVS) (known as the Secondary School Vocational Diploma [SSVD] prior to 1998), the Attestation of Vocational Specialization (AVS), the Attestation of Vocational Education (AVE) and certification for on-the-job training in a recycling facility.
2. At either the secondary or college level. It is possible–although less and less so in the past few years–for a person without a secondary school diploma to be accepted in college. Persons who enroll in university without a secondary school diploma are not taken into account here.

Table 2.6 shows the difference in dropout rates for male and female students and indicates that women are less likely to drop out of school. In 1979, the gender gap was relatively small, but was somewhat more pronounced in 2001. For example, for 19-year-olds, the dropout rate for men in 2001 was almost six tenths of what it was in 1979 (23.9% compared with 43.8%); for women, the rate in 2001 was less than four tenths of what it was in 1979 (13.4% compared with 37.2%). The situation of women has therefore improved more than that of men; this analysis also holds true for the other age groups in Table 2.6.

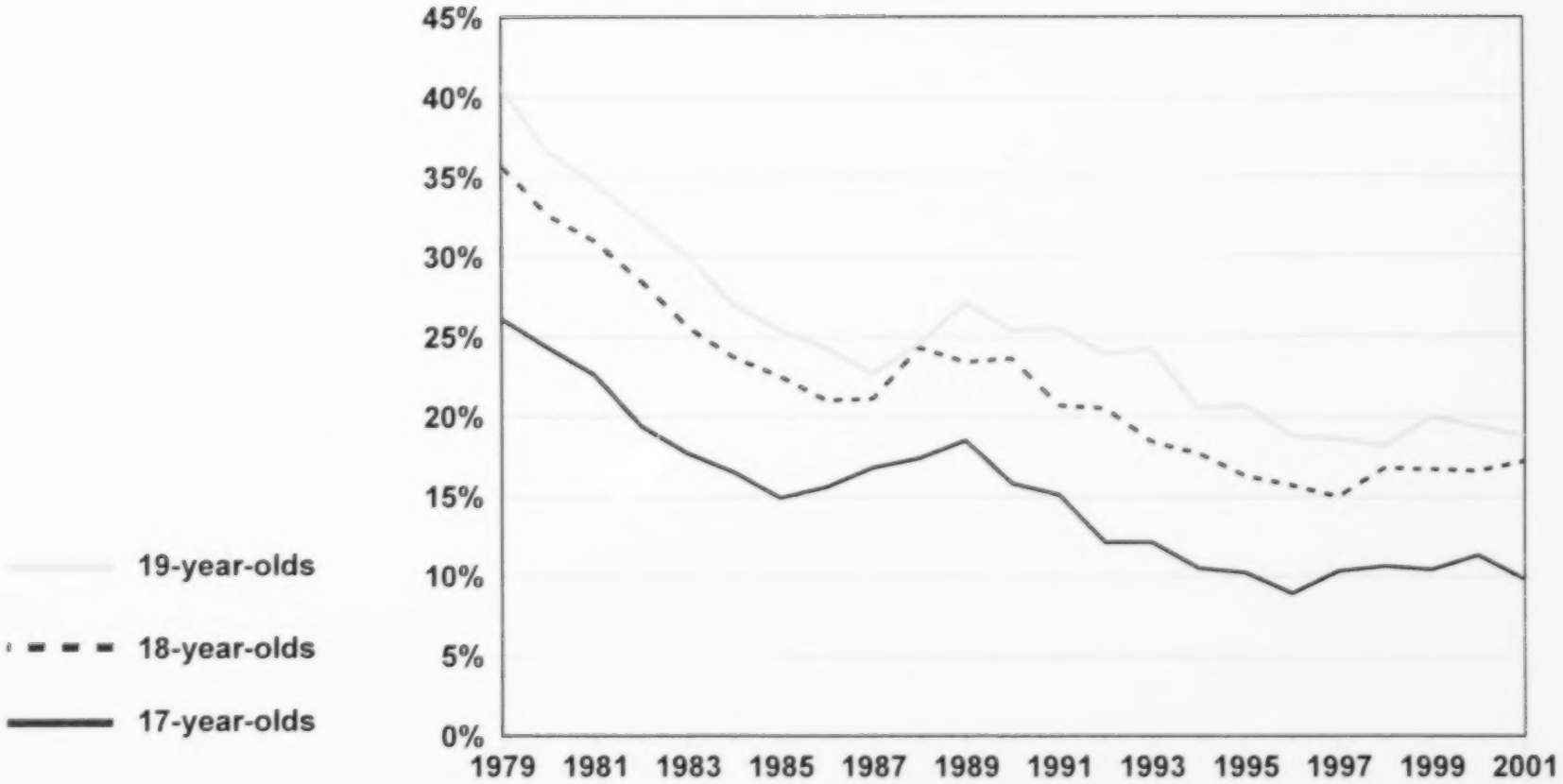
Table 2.6

Dropout rate by age and gender (%)

	1979	1989	1994	1999	2000	2001
17-year-olds	**26.1**	**18.5**	**10.5**	**10.4**	**11.3**	**9.8**
Male	27.6	21.3	12.1	13.3	13.8	12.4
Female	24.7	15.5	8.8	7.3	8.8	7.0
18-year-olds	**35.7**	**23.4**	**17.7**	**16.7**	**16.6**	**17.2**
Male	38.0	27.1	20.6	20.5	21.1	21.2
Female	33.2	19.6	14.6	12.6	11.9	13.0
19-year-olds	**40.6**	**27.1**	**20.5**	**20.0**	**19.4**	**18.8**
Male	43.8	31.1	24.7	24.7	24.0	23.9
Female	37.2	22.9	16.0	14.9	14.5	13.4

Graph 2.6

Dropout rate by age (%)



2.7 Grade Repetition in Elementary School and in Secondary General Education–Youth Sector

Even though the education reform is not yet in full swing, the objective of reducing grade repetition is already being felt: between 1999-2000 and 2001-2002, the repetition rate in elementary school fell from 4.0% to 3.1%, a considerable drop for this indicator.

Since its peak in 1990-1991, the proportion of students repeating a grade[1] has been dropping steadily, and stood at 4.7% in 2001-2002, the lowest level ever observed.

Grade repetition is more prevalent among male students than female students, regardless of school year or grade level. The proportion of male students who repeat a year is often more than one and a half times the proportion of female students in the same situation. Repetition rates are higher in secondary school than they are in elementary school, and the probability of repeating a year is always significantly higher in Secondary I. This situation is not surprising, considering that all elementary school students, including those with difficulties, are sooner or later promoted to secondary school, if only because they have turned 13 years of age. Moreover, students in individualized paths for learning may be classified for administrative purposes in Secondary I for several years.

The repetition rate for Secondary I (13.1% in 2001-2002) has always been high (16.8% in 1994-1995). However, with the education reform at the elementary level, students are more likely to repeat the second year of one of the three two-year cycles. In theory, repetition[2] should occur only at the end of a cycle, although it has been noted that some school boards have failed to respect the Ministère's directives in this matter.

Even if the proportion of students who repeat a year is relatively low in the final years of secondary school, it does not necessarily mean that student performance has improved. Some of these students have reached the age when school

1. Repeaters are those students who were in the same grade or a higher grade the preceding year. For our purposes, students in Elementary 7 and Secondary VI general education are considered repeaters.
2. It would be more accurate to speak of "extending" the cycle.

attendance is no longer compulsory and either drop out of school or continue their studies in vocational education or in the adult sector.

Obviously, the cumulative effect of grade repetition is to delay students in their schooling. Thus, in 2001-2002, at the end of the normal six-year period of elementary school, 20.3% of 12-year-olds had not reached secondary school. This proportion was 24.3% for male students and 16.2% for female students.

Repetition rates at the elementary level will be affected in the coming years because of changes brought about by the education reform.

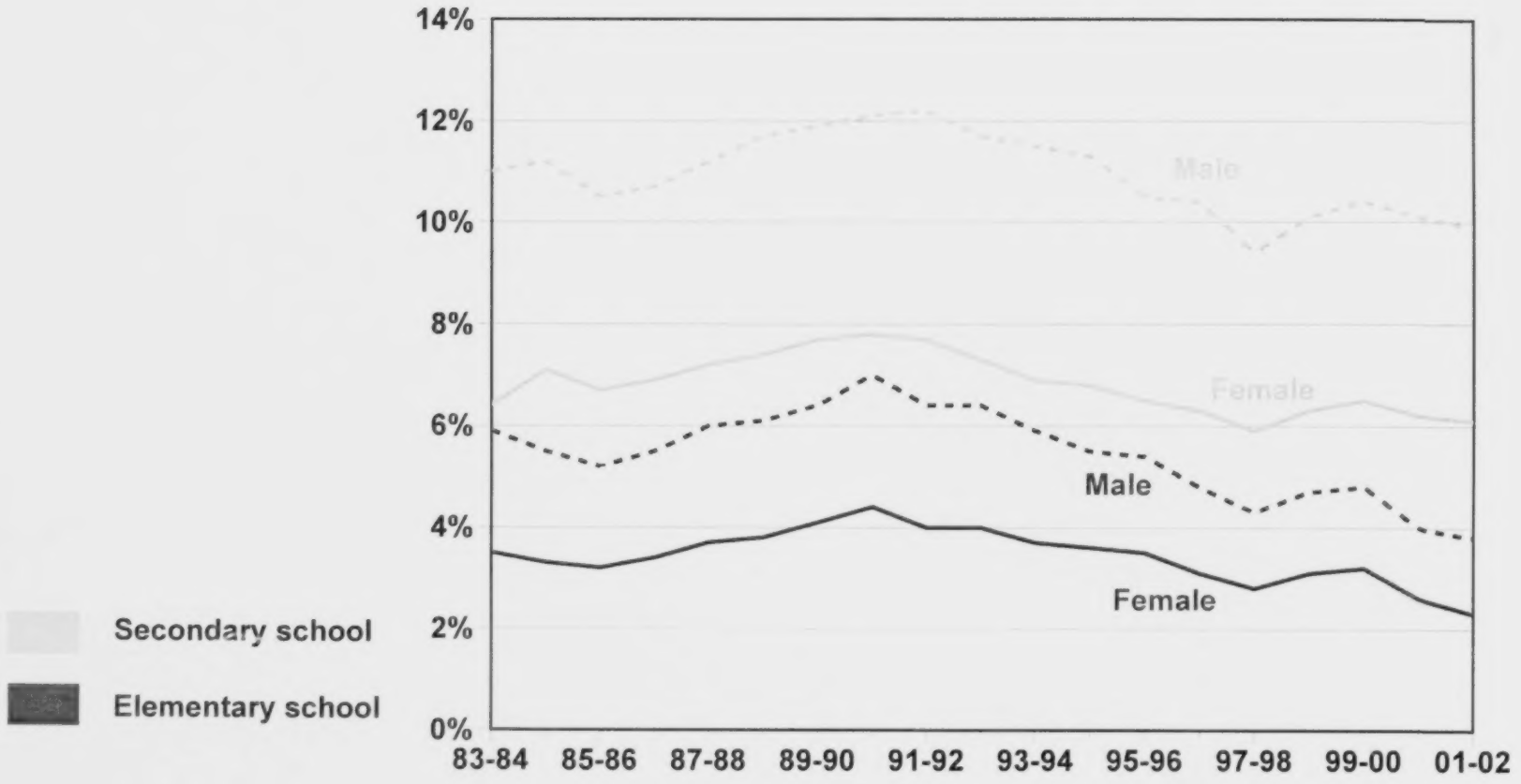
Table 2.7

Proportion of students repeating a year, by level of education and gender (%)

	1983-1984	1993-1994	1998-1999	1999-2000	2000-2001	2001-2002
Elementary school	**4.7**	**4.9**	**3.9**	**4.0**	**3.3**	**3.1**
Male	5.9	5.9	4.7	4.8	4.0	3.8
Female	3.5	3.7	3.1	3.2	2.6	2.3
Secondary school (general education)	**8.7**	**9.3**	**8.2**	**8.5**	**8.2**	**8.0**
Male	11.0	11.5	10.1	10.4	10.1	9.9
Female	6.4	6.9	6.3	6.5	6.2	6.1
Secondary I	**13.7**	**16.3**	**14.5**	**15.1**	**14.0**	**13.1**
Male	16.9	19.8	17.6	18.1	16.8	15.7
Female	10.1	12.4	11.1	11.6	10.8	10.1
Total	**6.5**	**6.9**	**5.8**	**5.9**	**5.4**	**4.7**
Male	8.1	8.5	7.1	7.2	6.6	5.8
Female	4.8	5.2	4.5	4.6	4.1	3.6

Graph 2.7

Proportion of students repeating a year, by level of education and gender (%)



2.8 College Enrollment–Regular Education[1]

In 2001-2002, 59.3% of a generation of young Quebeckers went on to college. This is more than 4 percentage points lower than the rate observed in 1996-1997, just before the drop in the secondary school graduation rate and the tightening of the criteria for admission to CEGEP.[2] Since then, enrollment appears to have begun a slow climb, interrupted by a drop in 2000-2001.

In 2001-2002, college enrollment regained half a point to reach 59.3%, which is still half a point lower than its level two years earlier.

College enrollment (regular education) rose by 22 percentage points between 1975-1976 and 1986-1987 (from 39.3% to 61.5%), followed by a drop of 5 percentage points in 1987-1988. In the six years thereafter, it rose by 10 percentage points, reaching a new high of 67.3% in 1993-1994. Since then, enrollment has dropped by 8 percentage points for all young Quebeckers.

Since the late 1970s, changes in college enrollment can be largely explained by trends observed at the secondary level in the youth sector: first, a rise in the graduation rate in secondary general education until 1985-1986, followed by a drop in the graduation rate owing to the application of tighter standards at the end of the 1980s, then by a return to an upward trend at a slower pace from 1990-1991 to 1995-1996, ending with a sudden drop in 1996-1997, which was finally ended in 1998-1999.

There is a close correlation between obtaining a secondary school diploma in general education in the youth sector or before the age of 20 in the adult sector, and enrolling in college. This correlation would seem to indicate that the majority of general education graduates, as well as a certain number of vocational education graduates, eventually go on to college.

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1. The figures mentioned here include only students enrolled for the first time in programs leading to a Diploma of College Studies (DCS) in regular education.
2. Since the fall of 1997, students who enroll in CEGEP must not only have their SSD, but must also have successfully completed the following courses: Secondary V language of instruction and second language, Secondary IV history and physical science, and Secondary V mathematics or comparable Secondary IV mathematics.

Over a period of 15 years or so, the gender gap in college enrollment has widened steadily. Although rather negligible in the mid-1970s, the difference reached 18.5 percentage points in favour of women in 2001-2002, with only women having regained any ground in the past four years.

College enrollment also varies depending on the type of education involved. Since 1984-1985, the probability of enrolling in pre-university education has remained steady, going from 34.8% to 34.1% in 2001-2002, after peaking at 43.9% in 1992-1993. The probability of enrolling in technical education at college declined from 21.6% to 18.1% from 1986-1987 to 1989-1990, returning to 23.2% in 1992-1993 and then settling at 19.1% in 2001-2002.

In recent years, the only regular education program where enrollment has increased is Explorations. In 1993-1994, 4.9% of students undertook college studies in this type of program; in 2001-2002, the figure was 5.7%, which, out of a total of 59.3%, represents close to one in ten new enrollments.

Table 2.8

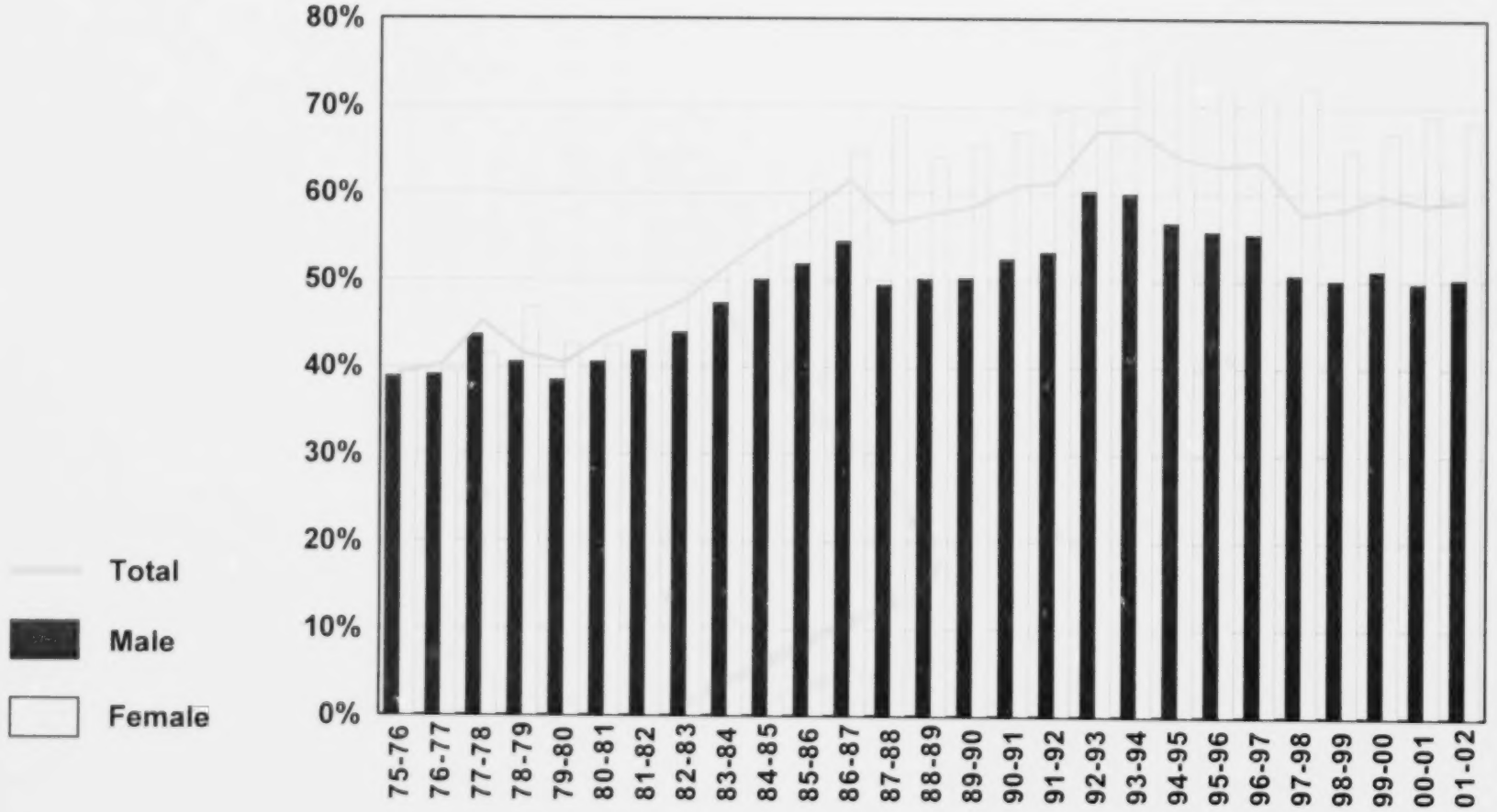
Full- or part-time enrollment in regular education in public or private colleges, by gender and type of education (%)

	1975-1976	1985-1986	1995-1996	1997-1998	2000-2001	2001-2002[e]
Male	**38.9**	**51.9**	**55.7**	**50.7**	**49.8**	**50.3**
Pre-university education	25.4	34.2	31.4	27.0	26.4	26.6
Technical education	13.4	17.6	18.4	18.3	17.2	17.0
Explorations	–	–	5.9	5.4	6.2	6.7
Female	**39.6**	**64.7**	**71.1**	**65.0**	**68.3**	**68.8**
Pre-university education	22.5	41.0	44.7	40.7	42.4	42.0
Technical education	17.1	23.7	20.3	29.3	20.7	21.2
Explorations	–	–	6.1	4.7	5.2	5.7
Total	**39.3**	**58.1**	**63.2**	**57.6**	**58.8**	**59.3**
Pre-university education	24.0	37.6	37.8	33.6	34.2	34.1
Technical education	15.3	20.6	19.4	18.9	18.9	19.1
Explorations	–	–	6.0	5.1	5.7	6.2

e: Estimates
–: Not applicable

Graph 2.8

Full- or part-time enrollment in regular education in private or public colleges, by gender (%)



2.9 Immediate Transition From College to University

The main objective of college pre-university education is to prepare students for university. In the fall of 2001, 77.4% of the class of 2000-2001 aged 24 or under with a diploma in a pre-university program[1] were enrolled full-time in university.[2] Also in the fall of 2001, 77.1% of women graduates of pre-university education were enrolled full-time in university, a slightly lower percentage than that of men in the same situation (77.9%).

In 2000-2001, 77.4% of pre-university education graduates and 20.2% of technical education graduates went on to study full-time at university in the fall of the year following their graduation from college.

Between 1994 and 1999, the proportion of pre-university education graduates who went on to university without interrupting their studies was between 78.6% and 84.0%. Since 1999, the rate has decreased, dropping to 77.4% in 2002. Although the method used to estimate the proportion of graduates enrolled in university immediately after completing college changed somewhat in 2002, data from the fall of 2001 confirms the downward trend observed in recent *Relance* surveys. In recent years, it has been easier for people between the ages of 20 and 24 to find jobs. This may be one of the factors explaining the decrease in the proportion of college graduates who enroll in university immediately after college.

In the fall of 2001, 20.2% of students aged 24 or under who earned a diploma in a technical program in 2000-2001 were enrolled full-time in university the following year, which is comparable to the situation observed in the two

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1. This refers to students who obtained a Diploma of College Studies (DCS) between the months of September and August of a given school year.
2. In 2002, the method used to estimate the proportion of college graduates going on to university without interrupting their studies was revised. From 1984 to 2002, estimates were based on the results of the *Relance* surveys conducted by the Ministère de l'Éducation, which present the situation of graduates of pre-university and technical programs as of March 31 following their year of graduation. In 2002, the proportion of college graduates going on to university without interrupting their studies was based on administrative data from the Système de gestion des données sur l'effectif universitaire (GDEU). For the purpose of comparing this data with data from the *Relance* surveys, the GDEU system was used to calculate the proportion of students who earned a college diploma in 2000-2001 and who were enrolled full-time in a Québec university in the fall of 2001. Although the data is from different sources, the proportions obtained using both methods are a satisfactory representation of the situation observed in 2002.

previous years. This result confirms the fact that more technical education graduates now go on to university. Indeed, the proportion of graduates of technical programs going on to university has been at least 20% in the past three years, the highest proportion since 1984, despite the fact that these graduates would have little difficulty finding a job.

More male graduates aged 24 or under with a diploma in a technical program have been enrolling full-time in university than their female counterparts since 1984.

Table 2.9

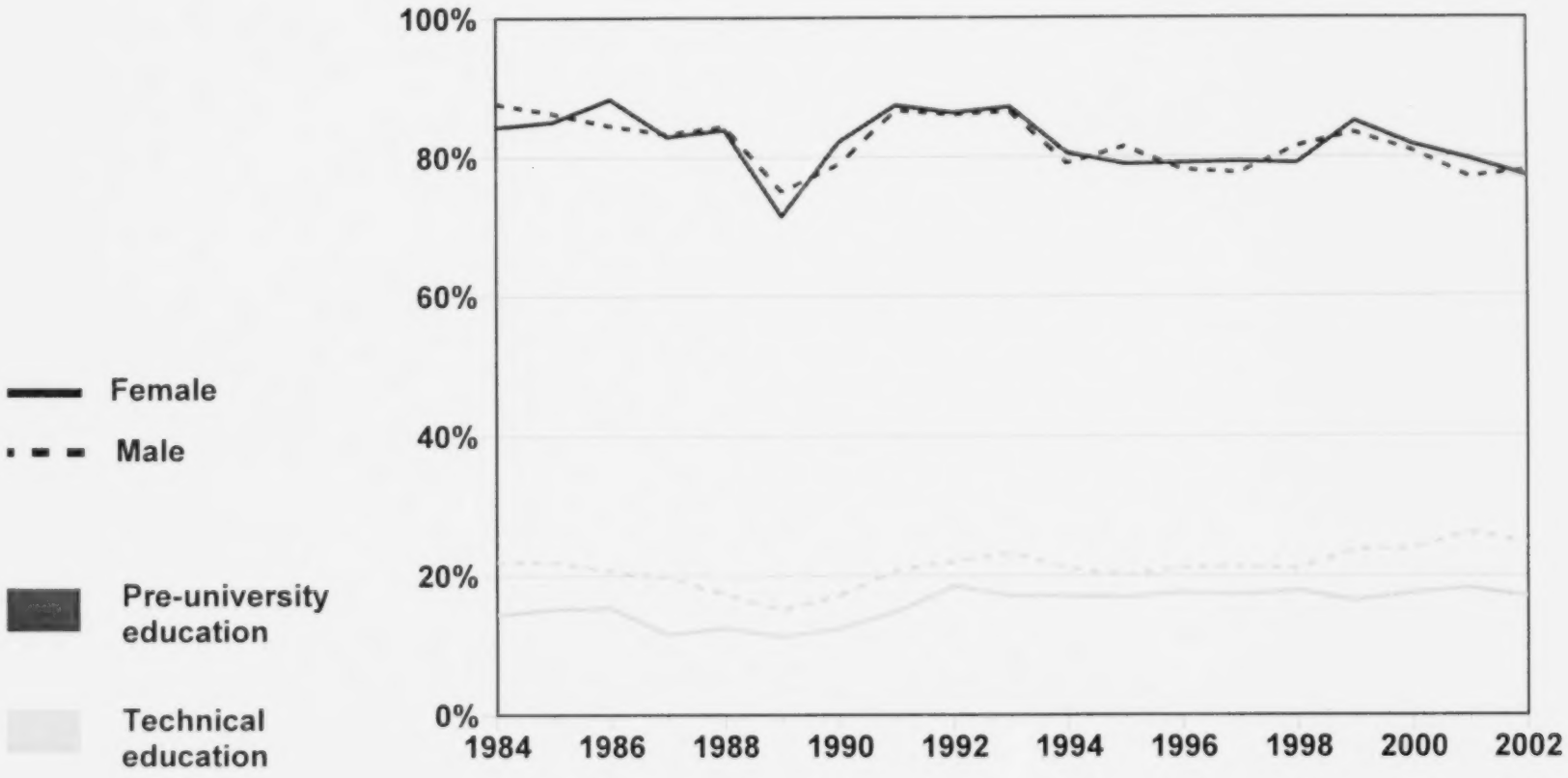
Proportion of college graduates (24 years old or under) enrolling full-time[3] in university without interrupting their studies, by type of education and gender (%)

	1984	1994	1999	2000	2001	2002
Pre-university education	**86.0**	**79.9**	**84.0**	**81.4**	**78.6**	**77.4**
Male	87.7	79.0	85.1	80.8	77.0	77.9
Female	84.3	80.5	83.4	81.7	79.6	77.1
Technical education	**17.4**	**18.6**	**19.2**	**20.0**	**21.5**	**20.2**
Male	21.9	21.0	23.7	23.9	26.3	24.7
Female	14.4	17.1	16.4	17.5	18.2	17.0

3. The statistics produced between 1984 and 2001 are based on government *Relance* surveys. They represent the proportion of college graduates who, on March 31 of the reference year, were not employed and were enrolled in university either part-time or full-time. The 2002 statistics are from the Système de gestion des données sur l'effectif universitaire (GDEU). They represent the proportion of students who earned a college diploma in 2000-2001 and who, in the fall of 2001, were enrolled full-time in a Québec university. In the calculation of the indicator based on the *Relance* surveys, the inclusion of college graduates enrolled part-time in university and the reference date used (March 31) combined to produce a slightly higher result than that of the new indicator used in 2002.

Graph 2.9

Proportion of college graduates (24 years old or under) enrolling full-time in university without interrupting their studies, by type of education and gender (%)



2.10 University Enrollment

This section concerns enrollment[1] in programs leading to a university degree at the bachelor's, master's or doctoral level. Enrollment in certificate programs and nonprogram studies is not measured here.

In 2002-2003, the proportion of students enrolling in university studies leading to a bachelor's degree stood, after a slow period, at 39.5%, the same level as that observed 10 years earlier.

In 1992-1993, the proportion of a generation enrolled for the first time in programs leading to a bachelor's degree increased by one third over an 8-year period, climbing to 39.7%, from 30.1% in 1984-1985. From 1992-1993 to 1997-1998, there was a decline of 5.8 percentage points in enrollment in bachelor's programs, and the rate fell to 33.9%. A similar decline was observed in enrollment in pre-university college programs after 1992-1993 (see Section 2.8). Thereafter, the rate began to rise again, reaching 39.5% in 2002-2003, its highest point since 1992-1993. Women posted an even higher rate of enrollment in programs leading to a bachelor's degree (46.2%).

Over this 18-year period, only women showed veritable gains in enrollment in bachelor's programs: the rate increased by 14.9 percentage points, whereas men (32.6%) were only slightly above the level observed in 1984-1985. The gender gap was 13.6 percentage points, whereas it had been 2.3 percentage points 18 years earlier.

With respect to master's programs, enrollment rose for a fifth time in a row to 11.5% after dropping for the first time in 1997-1998. Here too, gains were more favourable for women, whose enrollment rate was 11.7% in 2000-2001, compared with 11.4% for men. In 1984-1985, the difference was 1.5 percentage points in favour of men. At the master's level, women began showing definitive gains over men in 1993-1994. The overall increase in enrollment in master's programs (4.7 percentage points) between 1984-1985 and 2002-2003 was relatively greater than that observed at the bachelor's level.

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1. Since the data on new enrollments generally used for this indicator was unavailable at the time of writing, preliminary data on enrollments provided by the Conference of Rectors and Principals of Quebec Universities (CREPUQ) was used for the 2001-2002 and 2002-2003 figures. More specifically, the annual variation in new full-time enrollments in programs leading to a bachelor's degree was used to estimate enrollment for 2001-2002 and 2002-2003 on the basis of the most recent data observed, i.e. in 2000-2001. Data for programs leading to a master's degree or doctorate was estimated on the basis of variations in enrollment in these programs.

The growing interest in doctoral studies is significant even though it applies to only a small portion of the population. Enrollment rose from 1.1% in 1984-1985 to 2.2% in 2002-2003. Men continue to enroll in doctoral studies in slightly greater numbers (2.5%) than women (1.9%), but the number of women enrolling at this level has increased more rapidly in the past 18 years.

Table 2.10

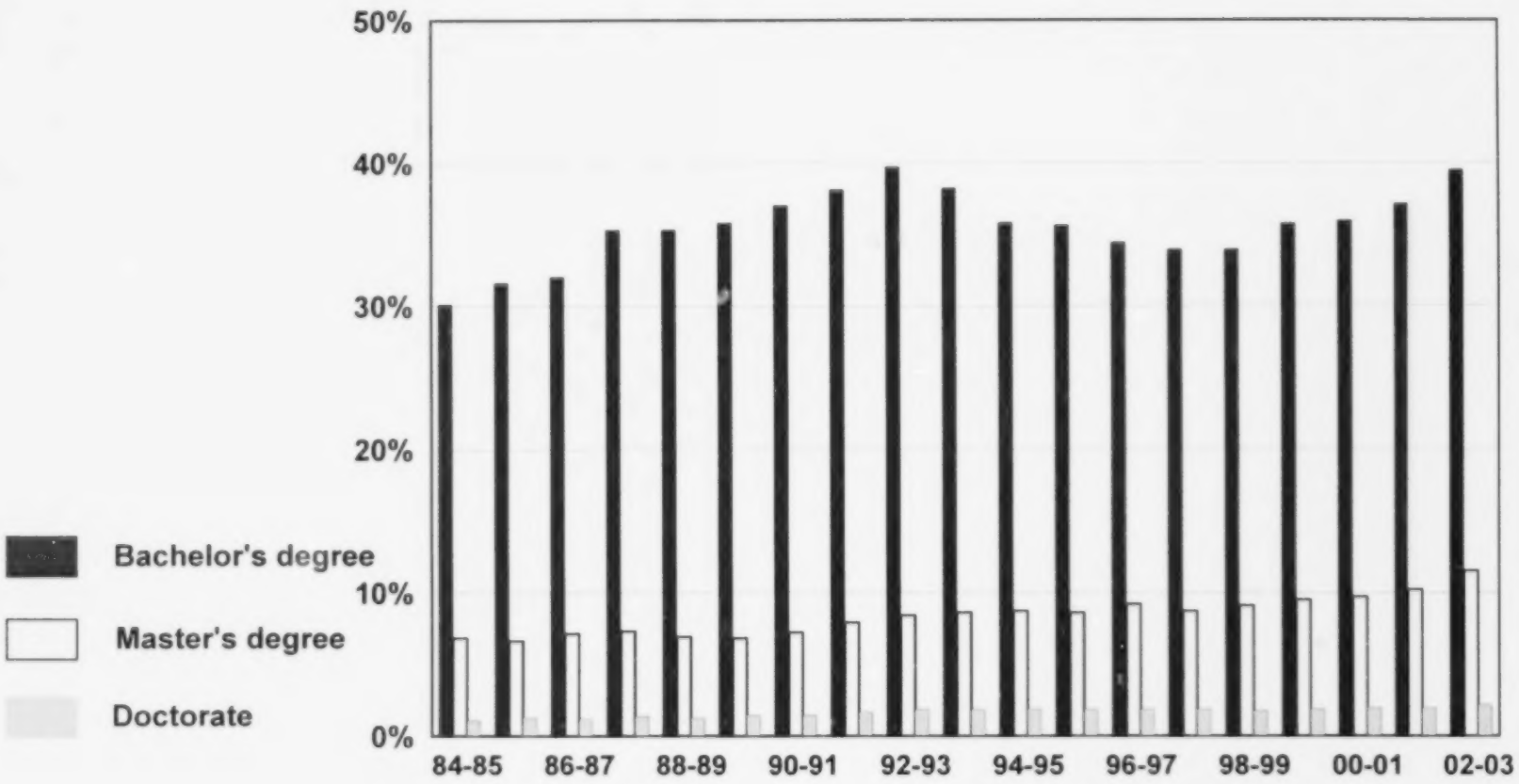
Enrollment in programs leading to a university degree, by gender (%)

	1984-1985	1992-1993	1997-1998	2000-2001	2001-2002[e]	2002-2003[e]
Bachelor's programs						
Male	29.0	34.8	28.9	29.2	30.4	32.6
Female	31.3	44.9	39.1	43.0	43.7	46.2
Total	**30.1**	**39.7**	**33.9**	**35.9**	**37.1**	**39.5**
Master's programs						
Male	7.5	8.5	8.4	9.6	10.2	11.4
Female	6.0	8.3	8.9	9.9	10.4	11.7
Total	**6.8**	**8.4**	**8.7**	**9.7**	**10.2**	**11.5**
Doctoral programs						
Male	1.4	2.3	1.9	2.2	2.3	2.5
Female	0.8	1.4	1.8	1.8	1.8	1.9
Total	**1.1**	**1.9**	**1.9**	**2.0**	**2.0**	**2.2**

e: Estimates (see note 1 at the bottom of the text)

Graph 2.10

Enrollment in a program leading to a university degree (%)



2.11 Training of Researchers

Students enrolled in a program leading to a doctorate are the most likely to go into university research. In the fall of 2001, these students numbered 8 664. From 1990 to 2001, their number increased by 23%, despite a 2% decrease between 1998 and 2001.

In the fall of 2001, 31% of doctoral students were enrolled in social sciences, 17% in applied sciences, 16% in pure sciences, and 13% in health sciences.

Enrollment in doctoral programs is mainly concentrated in social sciences, applied sciences, pure sciences and health sciences. In 2001, 31% of doctoral candidates were in social sciences, 17% in applied sciences, 16% in pure sciences, and 13% in health sciences.

Men accounted for most of the students enrolled in a doctoral program (54% in the fall of 2001, compared with 46% for women). In 1990, the percentages were 65% and 35%, respectively. From 1990 to 2001, the increase in the number of women enrolled in doctoral programs (61%) was much greater than it was for men (2%).

In 2001, 81% of the men in doctoral programs were enrolled in social sciences (25%), applied sciences (25%), pure sciences (19%) and health sciences (12%). The number of men enrolled in business administration has increased the most since 1990, that is, by 99%.

The distribution of enrollments in doctoral programs differs for women and men. In the fall of 2001, 37% of the female students were in social sciences, 15% in health sciences, 12% in pure sciences, 9% in literature, 8% in education and 8% in applied sciences. The largest annual increases in female enrollment since 1990 have been in the arts (223%), law (205%), the applied sciences and health sciences (106%), and business administration (94%).[1]

1. Female enrollment in interdisciplinary studies, which went from 21 in 1990 to 42 in 2001, is not taken into consideration.

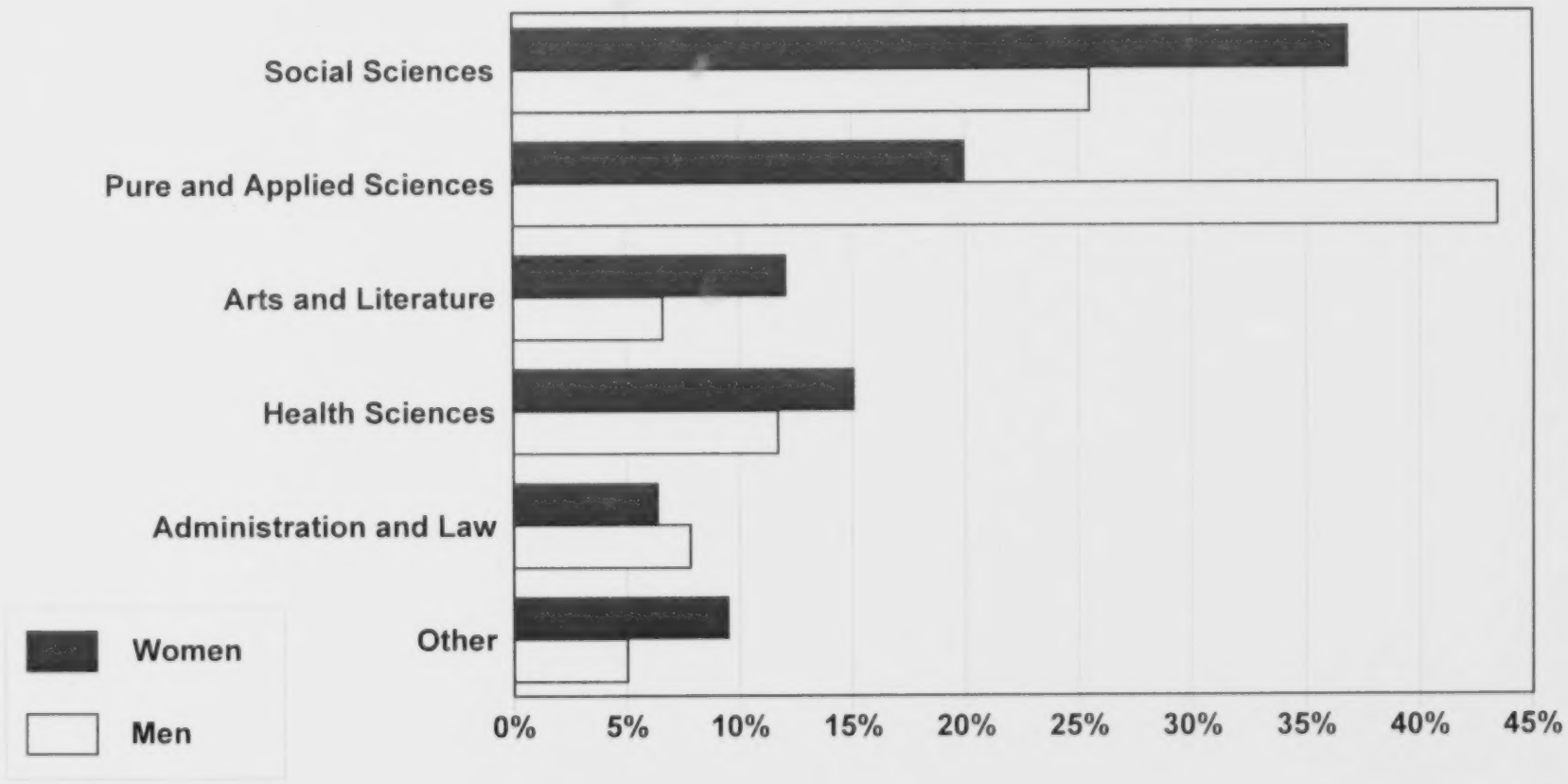
Table 2.11

Enrollment in doctoral programs, by field of study, 1990 to 2001 (fall term)

	1990	1995	1998	1999	2000	2001
Arts	96	120	175	186	200	209
Literature	654	770	690	665	607	584
Business administration	258	391	482	463	494	509
Law	58	103	107	108	109	110
Education	549	587	594	560	558	504
Social sciences	2 168	2 730	2 862	2 746	2 693	2 666
Pure sciences	1 229	1 506	1 365	1 347	1 351	1 355
Applied sciences	1 276	1 715	1 433	1 446	1 417	1 467
Health sciences	662	958	1 021	1 041	1 114	1 149
Interdisciplinary studies	60	126	105	96	93	88
Not applicable	27	171	22	21	17	23
Total	**7 037**	**9 177**	**8 856**	**8 679**	**8 653**	**8 664**

Graph 2.11

Distribution of enrollments in doctoral programs, by gender and field of study, fall 2001



3.1 Success in Secondary Cycle Two of General Education–Adult Sector[1]

Of the students in general education in the adult sector who left secondary school in 2000-2001, 14.0% obtained a diploma. If only students in Cycle Two are considered, the proportion more than triples, to 45.4%. Of the various instructional services[2] only Secondary Cycle Two normally leads to a diploma. Figures for new enrollments broken down according to instructional service are available as of 1988-1989 only. These figures show that the proportion of graduates was 23.2% for students leaving Secondary Cycle Two; the rate has therefore doubled since that time.

For students under the age of 20 who were enrolled in Secondary Cycle Two in the adult sector in 2000-2001, the probability of obtaining a diploma was 54.2%.

Although earning a diploma is not the most appropriate criterion for measuring success in the other instructional services, it can nevertheless be observed that the proportion of graduates is on the rise among students in all the instructional services in the adult sector. Since 1980-1981, this proportion has risen from 11.5% to 14.0%. This increase is due primarily to the fact that fewer students are dropping out of instructional services that do not lead directly to a diploma. Instead of quitting school, students pursue their studies in another instructional service, and thus enter Cycle Two and eventually earn a secondary school diploma.

Among students leaving school, the proportion who hold a diploma is higher for those under 20 years of age than for all ages combined. Thus, in Secondary Cycle Two, 54.2% of the students leaving before the age of 20 did so with a

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1. Success in general education is measured here by the proportion of new graduates among all general education students leaving secondary school with or without a diploma. The diplomas counted are those obtained during or at the end of the last year of enrollment or the following year, if the student has not re-enrolled. Students are considered to have left school without a diploma when they have been absent for a period of at least two years following the last year of enrollment.
2. The following instructional services are offered, or were offered in the past, in general education in the adult sector: Integration into Community Life Program (ICLP), sociovocational integration services, pre-employment training activities (PTA), literacy services, francization services, adults educated in the youth sector, study skills and career planning, preparatory services for secondary education, Secondary Cycle One education services, Secondary Cycle Two education services, vocational training preparation services, preparatory services for postsecondary education, and preparatory services for higher education.

diploma; progress has been considerable in this respect, because the corresponding proportion for 1988-1989 was 36.3%. With respect to instructional services as a whole, the proportion of those under the age of 20 leaving with a diploma grew from 22.0% to 26.2% between 1980-1981 and 1999-2000.

In 1980-1981, the graduation rate was slightly higher for male students than for female students, but the situation has since reversed. In 2000-2001, the graduation rate for female students exceeded that of male students by 2.8 percentage points, and this difference was 9.6 percentage points for those under 20 years of age.

Table 3.1

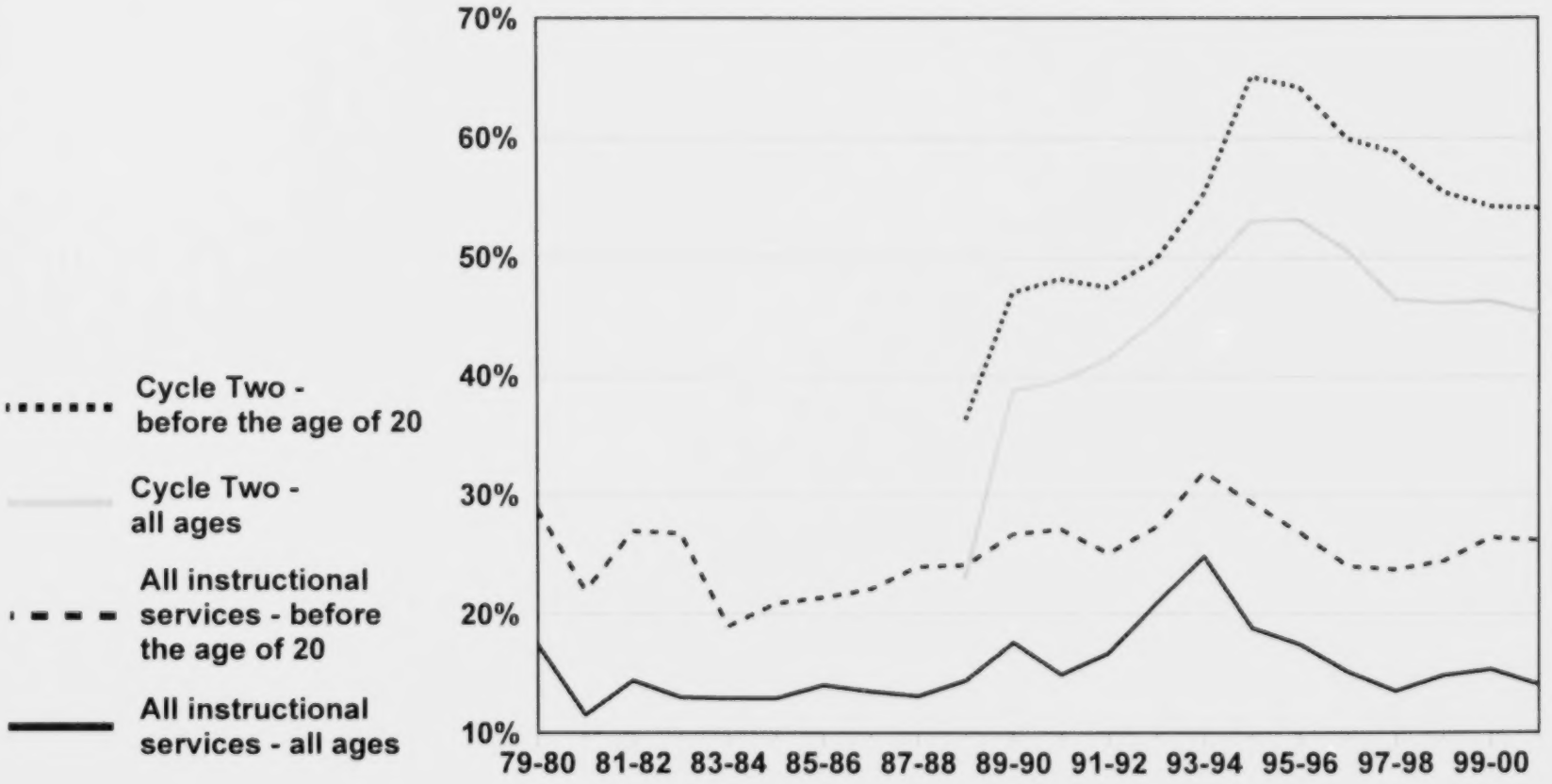
Proportion of students leaving general education in the adult sector with a diploma,[1] by gender, instructional service, age and last year of enrollment (%)

	1980-1981	1988-1989	1990-1991	1995-1996	1999-2000	2000-2001[e]
Male						
Secondary Cycle Two	N/A	22.7	37.3	50.2	43.3	42.0
Under the age of 20	N/A	36.2	45.4	50.1	50.4	50.5
All instructional services	13.1	13.2	13.1	14.9	13.6	12.2
Under the age of 20	23.1	22.4	23.9	21.5	22.2	21.8
Female						
Secondary Cycle Two	N/A	23.6	41.4	55.9	49.4	48.6
Under the age of 20	N/A	36.4	50.9	57.1	59.0	58.3
All instructional services	10.3	15.3	16.5	20.0	17.1	16.0
Under the age of 20	20.8	25.8	30.9	31.5	32.7	32.6
Total						
Secondary Cycle Two	N/A	23.2	39.6	53.2	46.4	45.4
Under the age of 20	N/A	36.3	48.2	53.3	54.3	54.2
All instructional services	11.5	14.4	14.9	17.4	15.3	14.0
Under the age of 20	22.0	24.1	27.1	25.5	26.4	26.2

N/A: Data not available
e: Estimates
1. All secondary school diplomas are taken into account.

Graph 3.1

Proportion of students leaving general education in the adult sector with a diploma, by last year of enrollment (%)



3.2 Success in Secondary Vocational Education[1]

Of the students in vocational education[2] who left secondary school in 2000-2001, 56.9% obtained a diploma. If only those students truly considered to be working toward a diploma, that is, full-time students,[3] are considered, the proportion of graduates climbs to 81.0%, about the usual level.

In 2000-2001, although the success rate for male students in programs leading to a DVS increased by one percentage point to 64.8%, it was still lower than for female students who surpassed male students for the first time in a decade in 1999-2000.

Since the beginning of the vocational education reform in 1987-1988, the percentage of graduates has increased appreciably. For example, at the end of 2000-2001, the proportion of students graduating from programs leading to a Diploma of Vocational Studies (DVS) (known as the Secondary School Vocational Diploma [SSVD] prior to 1998) was 67.3%, compared with 43.4% in 1988-1989. The success rate for long vocational programs has not increased much since the mid-1980s, but data on long vocational programs concerned only the youth sector. If only full-time students are considered,[3] progress is more evident. As noted earlier, the proportion of graduates among students enrolled for the last time in 2000-2001 was 81.0%, compared with 56.3% for students enrolled for the last time in 1980-1981.

However, if we consider all school leavers without taking into account the sector or whether enrollment is full-time or part-time, the proportion of diplomas has also increased since the early 1980s. Thus, the success rate of persons enrolled in vocational education for the last time in 1980-1981 was 46.6%. This overall proportion rose to 56.9% in 2000-2001.

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1. Success in vocational education is measured here by the proportion of new graduates among all vocational education students leaving secondary school with or without a diploma. The diplomas counted are those obtained during or at the end of the last year of enrollment or the following year, if the student has not re-enrolled. Students are considered to have left school without a diploma when they have been absent for a period of at least two years following the last year of enrollment.
2. Because school boards are not required to transmit vocational education enrollment data when a diploma, attestation or certificate is not awarded, the denominator for the success rate may be incomplete.
3. Students enrolled for 270 course hours or more per year are considered full-time.

There was a significant decline in the number of new enrollments in vocational education during the 1980s (see Section 2.4). Students are now required to spend more time in general education before being admitted into vocational education. General education graduates still have higher success rates in vocational education than students who do not already have a diploma. This explains in large part the higher success rate observed for all school leavers in recent years.

The differences in the results of male and female students have varied over the years. In 1999-2000, there was a reversal in trends relating to graduation from programs leading to a DVS and the success rate of female students surpassed that of male students (69.6% compared with 61.1%). In the past, the success rate for male students was 2 to 10 percentage points higher than for female students. However, when only the overall graduation rate by gender is considered, the success rate for female students has been higher for a long time. In 1985-1986, the proportion of female students graduating from vocational education was 36.2%, compared with 28.7% for male students; in 2000-2001, the proportions were 63.9% and 52.4%, respectively.

Table 3.2

Proportion of students leaving secondary vocational education with a diploma,[1] by gender, category and last year of enrollment (%)

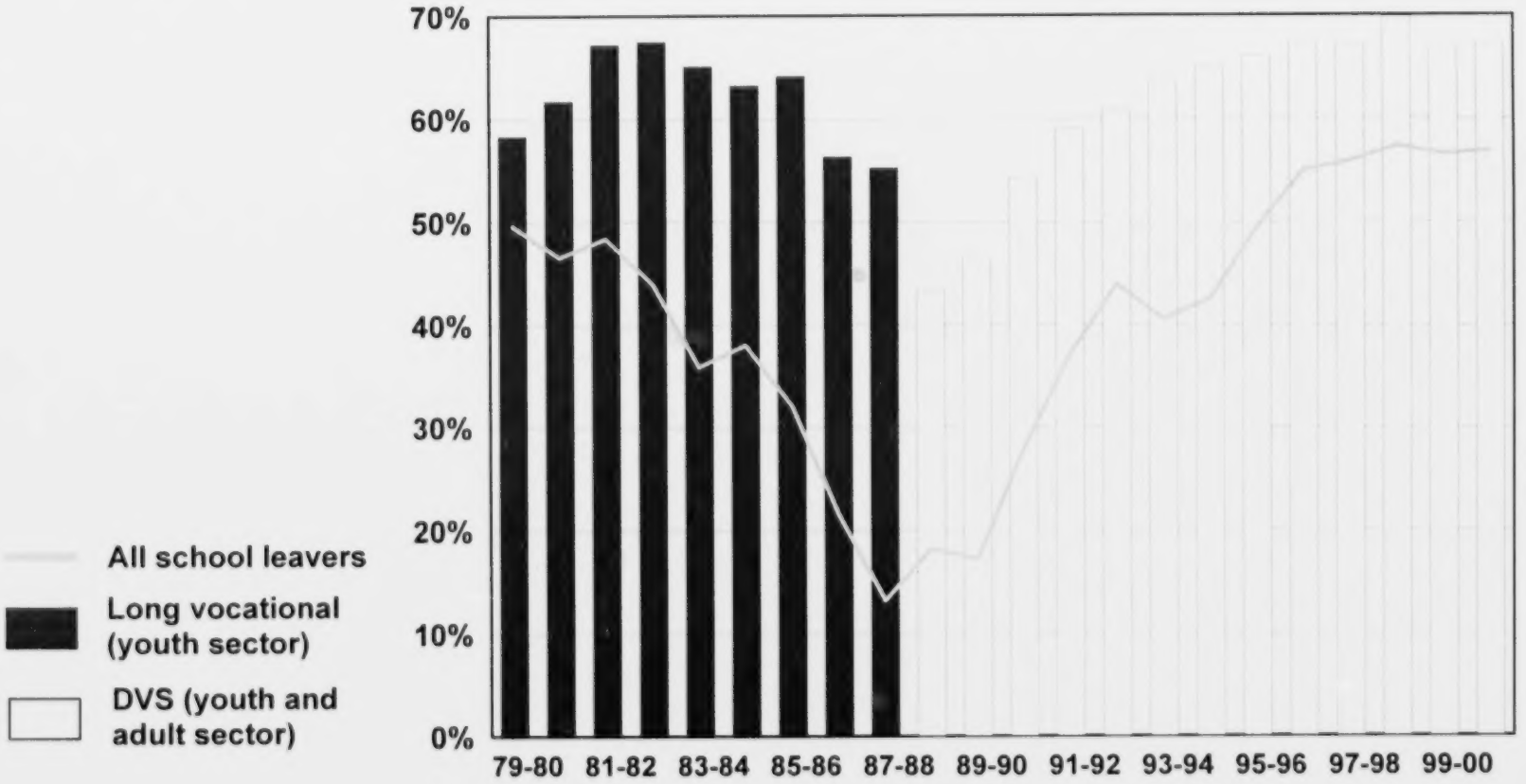
	1980-1981	1985-1986	1990-1991	1995-1996	1999-2000	2000-2001[e]
Male						
Long vocational or DVS[2]	57.1	58.3	60.0	67.7	63.9	64.8
Full-time[3]	51.8	51.4	81.0	79.5	81.6	80.1
All male school leavers	48.3	28.7	21.7	46.1	50.7	52.4
Female						
Long vocational or DVS[2]	65.5	69.5	50.2	64.4	70.2	70.7
Full-time[3]	61.3	62.0	80.0	78.3	82.4	82.2
All female school leavers	45.2	36.2	39.3	53.9	65.7	63.9
Total						
Long vocational or DVS[2]	61.7	64.1	54.3	66.1	66.6	67.3
Full-time[3]	56.3	56.6	80.5	78.9	82.0	81.0
All school leavers	46.6	32.1	27.9	49.5	56.6	56.9

e: Estimates

1. All secondary school diplomas are taken into account.
2. Figures for 1980-1981 and 1985-1986 cover enrollment in long vocational programs in the youth sector. After 1988-1989, figures take into account DVSs in the youth and adult sectors.
3. Students enrolled for 270 course hours or more per year are considered full-time.

Graph 3.2

Proportion of students leaving secondary vocational education with a diploma, by last year of enrollement (%)



3.3 Success in Pre-University Programs in Regular College Education[1]

Of the students in pre-university programs who left regular college education at the end of 2000-2001, two thirds earned a Diploma of College Studies (DCS). In the past two decades, this graduation rate has fluctuated between 63.9% and 71.6%. Before the drop of 1.6 percentage points recorded since 1999-2000, a significant increase in success rates had been observed: from 64.7% in 1995-1996 to 70.2% in 1998-1999. The stricter admission criteria that came into effect in the fall of 1997 (see Section 2.8) largely explain this increase, because fewer of the students who are most likely to quit their studies are able to enroll in college.

The proportion of students in pre-university education graduating with a DCS has been decreasing for the past two years and stood at 68.7% in 2000-2001, after having increased by 5 percentage points between 1995-1996 and 1998-1999.

Women tend to do better than men in pre-university programs and the gap has grown over the years. In 1980-1981, the proportion of women finishing their pre-university education with a DCS surpassed that of men by 3.9 percentage points. In 2000-2001, the difference was 12.2 percentage points in favour of women (it was 10.8 percentage points in 1995-1996). This phenomenon, coupled with the fact that more women than men enroll in college (see Section 2.8), explains the gender gap with respect to graduation rates (see Section 5.6).

When the type of initial college program is taken into account, the success rate is slightly above average for students who began their studies in pre-university programs: in 2000-2001, it was 70.7%. Students arriving from technical programs had markedly lower success rates (52.6% in 1993-1994). Given that since 1994-1995 some graduates have also begun in Explorations programs (introduced the previous year), the success rate remained lower for pre-university program students who came from another type of program. This rate only cleared the 50% mark in 1998-1999 and reached 52.1% in 2000-2001.

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1. Success in pre-university programs in regular college education is measured here by the proportion of new graduates among all students in pre-university programs in regular college education who leave programs leading to a DCS, with or without a diploma. DCSs of all types are counted, whether they were obtained during or at the end of the school year in which the student was last enrolled, or the following year, if the student has not re-enrolled in a program leading to a DCS. Students are considered to have left school without a diploma when they have been absent for a period of at least two years following the last year of enrollment.

In theory, it takes two years to obtain a DCS in a pre-university program, but very few students do so within this time frame. In fact, the rate of completion within two years (that is, the time elapsed from initial enrollment in a program leading to a DCS) reached 42.7% in 2000-2001 for students who began their studies in a pre-university program. This rate was at its lowest point, 35%, in 1986-1987. If all pre-university program graduates are considered, regardless of the program in which they were initially enrolled, obviously their success rate for two-year completion will be slightly lower because students who transfer from other programs spend more time in school. Generally, almost all (98%) of the pre-university DCSs are obtained within five years of the start of college studies; in 2000-2001, the corresponding success rate was 69.8%.

Table 3.3

Proportion of students leaving a pre-university program with a DCS, by last year of enrollment in regular college education, gender, type of initial program, and time elapsed[1] since initial enrollment (%)

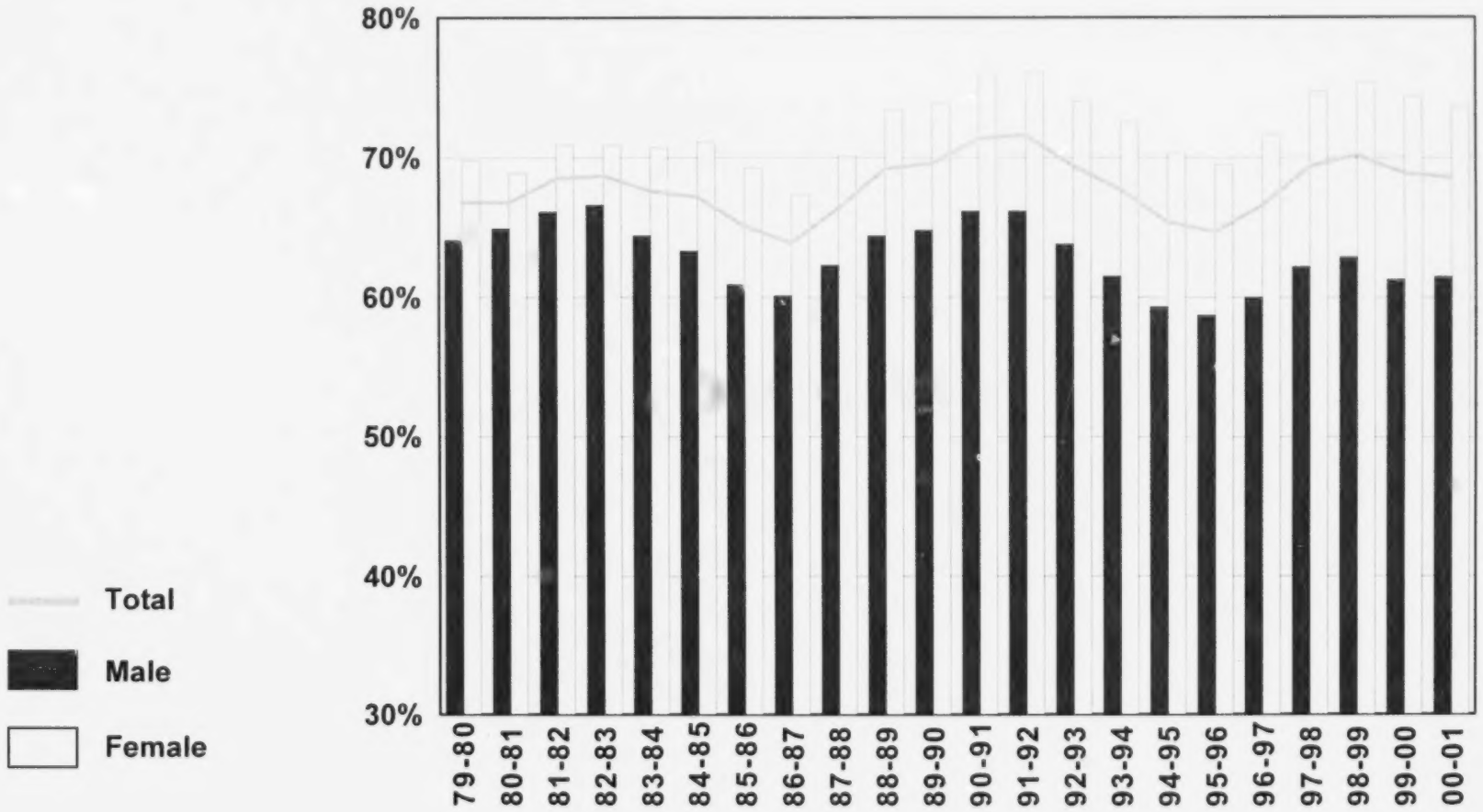
	1980-1981	1990-1991	1995-1996	1998-1999	1999-2000	2000-2001[e]
Male and female						
Same type of initial program						
2 years or less[1]	N/A	40.5	36.6	41.7	42.5	42.7
5 years or less[1]	N/A	70.8	65.2	70.8	69.6	69.6
All durations	N/A	72.0	66.5	72.1	71.0	70.7
Other type of initial program[2]						
All durations	N/A	61.3	47.5	54.9	53.1	52.1
All types of initial programs–all durations						
Male and female	66.8	71.4	64.7	70.2	68.9	68.6
Male	64.9	66.2	58.7	62.9	61.3	61.5
Female	68.8	75.8	69.5	75.4	74.4	73.7

e: Estimates
N/A: Data not available

1. The time elapsed since initial enrollment is not necessarily the same as the duration of studies, because the studies may have been interrupted at some point.
2. Until 1993-1994, this category referred to students who began their studies in a technical program. As of 1994-1995, this category also includes students who leave pre-university education (with or without a diploma) after having begun in an Explorations program the previous year.

Graph 3.3

Proportion of students leaving a pre-university program with a DCS, by gender and last year of enrollment in regular college education (%)



3.4 Success in Technical Programs in Regular College Education[1]

Of the students in regular college education who left technical programs at the end of 2000-2001, 57.3% earned a Diploma of College Studies (DCS). In the past two decades, this graduation rate has fluctuated between 52.7% and 60.7%.

Of the students in technical programs who left school in 2000-2001, 57.3% earned a DCS; this percentage has increased slightly in the past four years.

In this area, women still do better than men. The gender gap was at its greatest (17.1 percentage points) in 1997-1998 and narrowed by 5 percentage points in 2000-2001, when the success rate for women was 63.0% compared with 51.0% for men, a difference of 12 percentage points in favour of women. This phenomenon, coupled with the fact that more women than men enroll in college (see Section 2.8), explains the difference between the sexes with respect to graduation rates (see Section 5.6).

When the type of initial college program is taken into account, for the first time in 1999-2000, the success rate was higher than the average for students who began their studies in technical programs (57.0% in 1999-2000). Moreover, students who began in pre-university programs and who transferred to technical programs had markedly higher success rates (more than 60% until 1993-1994). Since 1994-1995, the success rates of students who began their college studies in programs other than technical programs were brought down by the rates of students in Explorations programs (introduced in 1993-1994). Students who began elsewhere than in technical programs accounted for almost one quarter of these graduates; they accounted for more than one third of technical DCSs in 2000-2001.

In theory, it takes three years to earn a DCS in a technical program, but very few students do so within this time frame. In fact, the rate of completion within three years (that is, the time elapsed from initial enrollment in a program leading to

1. Success in technical programs in regular college education is measured here by the proportion of new graduates among all students in technical programs in regular college education who leave programs leading to a DCS, with or without a diploma. DCSs of all types are counted, whether they were obtained during or at the end of the school year in which the student was last enrolled, or the following year, if the student has not re-enrolled in a program leading to a DCS. Students are considered to have left school without a diploma when they have been absent for a period of at least two years following the last year of enrollment.

a DCS) was 32.0% in 2000-2001 for all students who began in technical programs. If all technical education graduates are considered, regardless of the program in which they were initially enrolled, obviously their success rate for three-year completion will be slightly lower because students who transfer spend more time in school. Generally, a higher proportion of technical DCSs (85% to 90%) are obtained within five years of the start of college studies; in 2000-2001, the corresponding success rate was 52.2%.

While students who began their college studies directly in technical programs can obtain their DCS more quickly, it seems that the students who come from pre-university programs are more likely to obtain their DCS if the time elapsed since the beginning of their studies is not taken into account.

Table 3.4

Proportion of students leaving a technical program with a DCS, by last year of enrollment in regular college education, gender, type of initial program, and time elapsed since initial enrollment[1] (%)

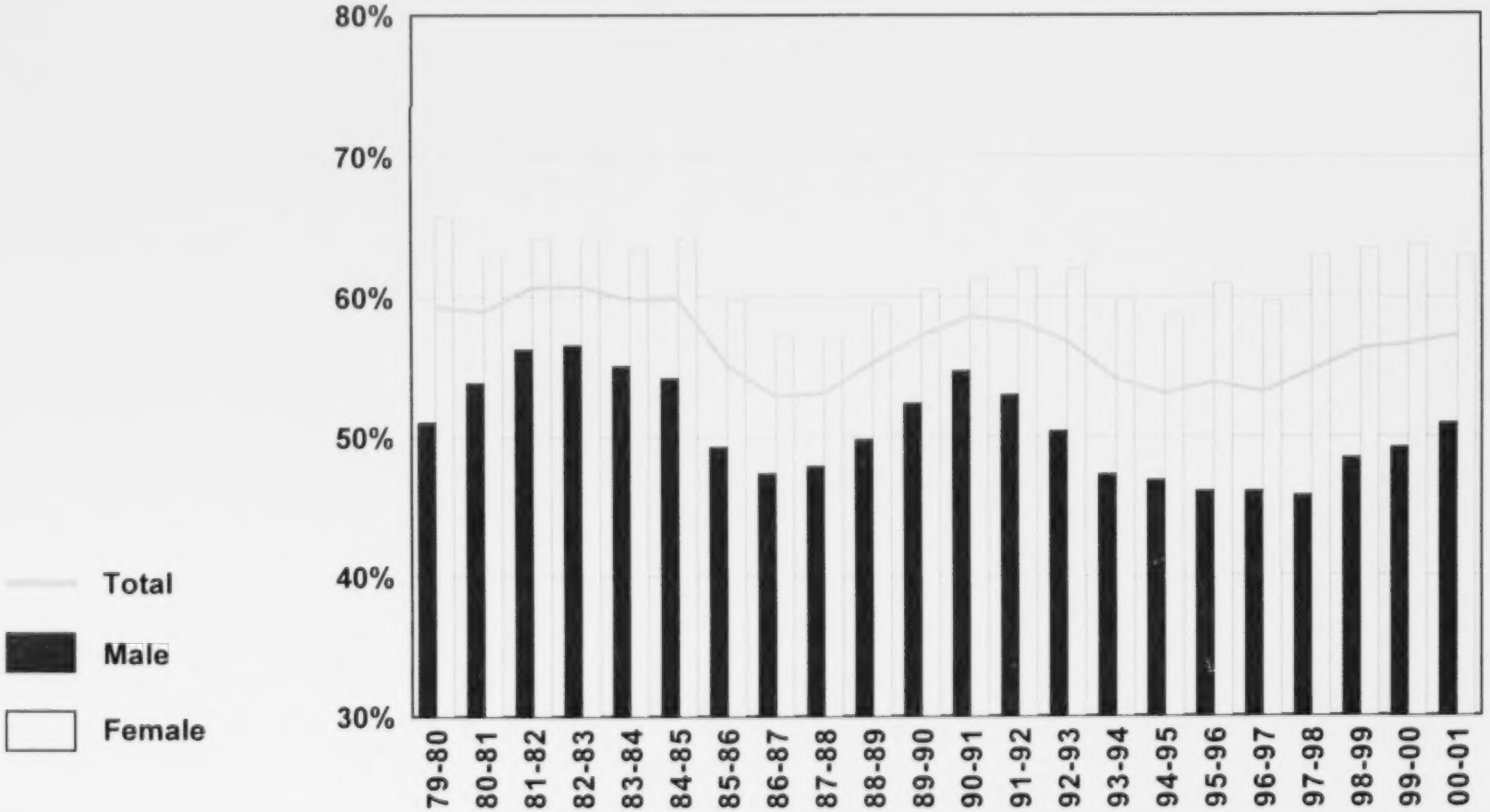
	1980-1981	1990-1991	1995-1996	1998-1999	1999-2000	2000-2001[e]
Male and female						
Same type of initial program						
3 years or less[1]	N/A	29.6	26.8	29.9	31.3	32.0
5 years or less[1]	N/A	51.1	47.8	50.1	52.1	52.2
All durations	N/A	56.6	53.1	55.4	57.0	57.5
Other type of initial program[2]						
All durations	N/A	64.4	55.7	58.2	56.7	56.9
All types of initial programs–all durations						
Male and female	59.0	58.6	53.9	56.3	56.7	57.3
Male	53.9	54.7	46.1	48.5	49.3	51.0
Female	63.0	61.3	60.9	63.4	63.7	63.0

e: Estimates
N/A: Data not available

1. The time elapsed since initial enrollment is not necessarily the same as the duration of studies, because the studies may have been interrupted at some point.
2. Until 1993-1994, this category referred to students who began their studies in a pre-university program. As of 1994-1995, this category also includes students who left technical education (with or without a diploma) after having begun in an Explorations program the previous year.

Graph 3.4

Proportion of students leaving a technical program with a DCS, by gender and last year of enrollment in regular college education (%)



3.5 Duration of Studies in Regular College Education

The duration of studies for holders of a Diploma of College Studies (DCS) and for all students (regardless of whether or not they obtain a DCS) has changed very little over the years.[1]

On average, a DCS in pre-university education is obtained after 2.4 years equivalent to full-time study and a DCS in technical education, after 3.8 years.

Graduates from pre-university education have studied for an average of 2.4 years. For those who leave without a diploma, the total duration of studies is still an average of 1.5 years. The average duration of studies, whether students leave with or without a diploma, is 2.1 years.[2] For most students, that is, those who began their college studies directly in pre-university programs, the corresponding durations are similar or are 0.1 years less. Students who transferred from another type of program take 3.1 years to obtain their DCS in pre-university education.

Students in technical programs take an average of 3.8 years to earn a DCS, while those who leave without a diploma do so after 2.1 years. Given the success rate (see Section 3.4), students leaving technical programs study for 3.1 years. Here too, those students who enrolled in technical programs right from the beginning of their college studies leave in a shorter time: those leaving with a DCS do so in 3.5 years and those leaving without a diploma do so after 1.8 years. However, students who had initially enrolled in pre-university programs (who have a higher success rate) or in Explorations programs take 4.5 years to obtain a DCS in technical education.

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1. This is why the results of this section are the averages for college leavers for the last five years observed (that is, the averages for students enrolled for the last time from 1995-1996 to 1999-2000). However, in the case of students leaving without a diploma, over a 10-year period, the duration of studies before dropping out has lengthened, by 0.4 full-time terms for pre-university education and by 1 full-time term for technical education.
2. The duration of studies for all college leavers depends, on the one hand, on the respective duration of studies of students with a DCS and college leavers without a diploma, and on the other hand, on the weighting of these two categories of students, that is, the success rate. This explains why the duration of studies for all students, whether or not they leave with a diploma, has remained stable, even though the success rates have been dropping and the duration of studies for those leaving without a diploma has been getting longer.

Very slight differences in the duration of studies are apparent in the figures for men and women, and according to the status upon leaving. In pre-university education, female graduates, like women who leave their studies before obtaining a diploma, do so sooner (0.1 years) than men. This difference disappears, however, when college leavers overall are considered by gender because more women than men obtain a diploma, which raises the average duration of studies for women overall. The same effect can be observed in technical education, where female graduates study 0.1 years less than their male counterparts, while women who leave their studies before obtaining a diploma spend the same amount of time in school as men (2.1 years), with the ironic result that women overall study longer because more of them graduate.

Table 3.5

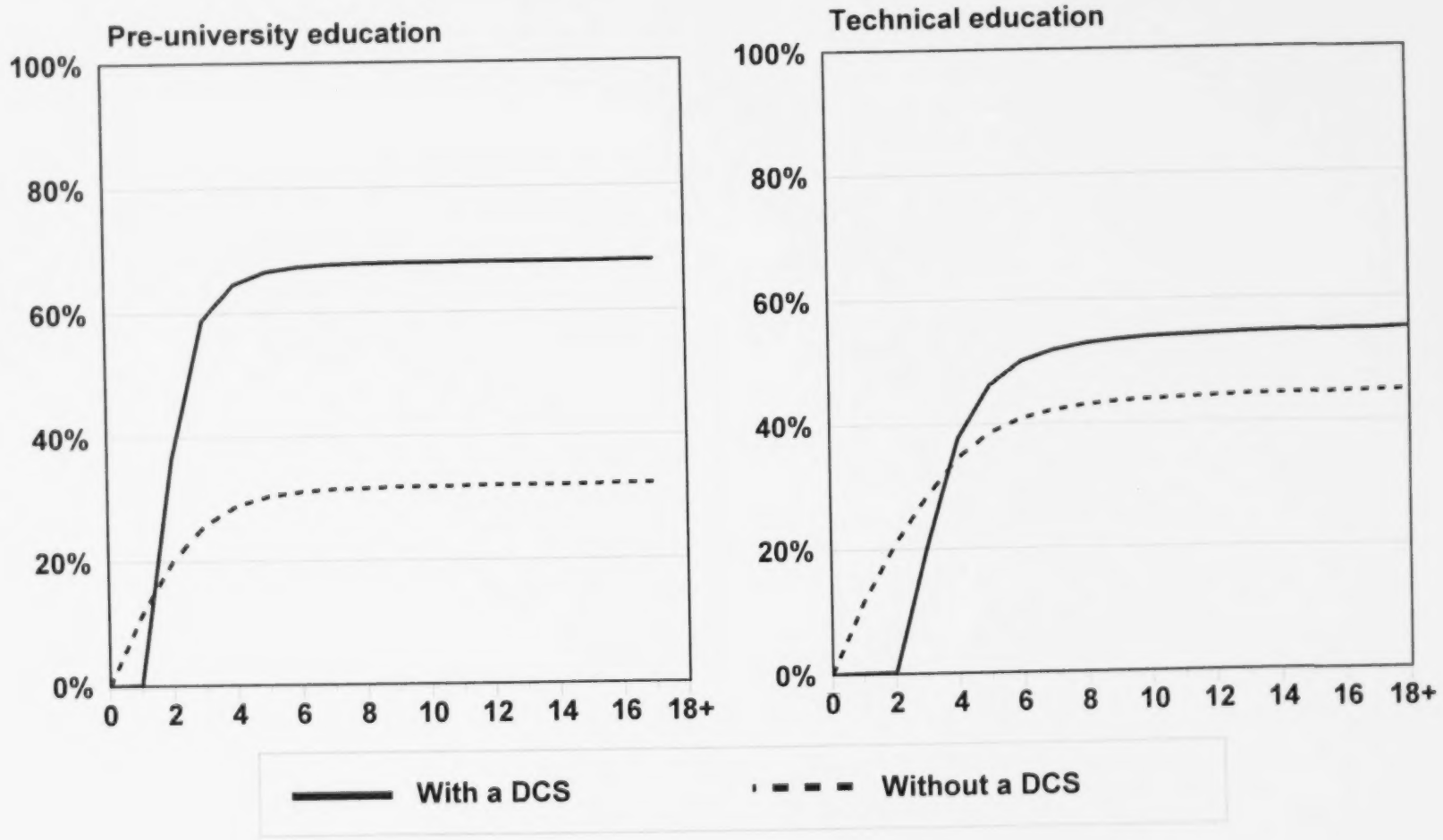
Average number of years[1] of study completed before leaving regular college education (average for all college leavers after 1996-1997), by gender and type of program enrolled in at the start and finish of the studies

	With Diploma		Without Diploma[2]		Total	
	Pre-university education	Technical education	Pre-university education	Technical education	Pre-university education	Technical education
Male	2.5	3.9	1.5	2.2	2.1	3.0
Female	2.4	3.8	1.4	2.1	2.1	3.1
Total[3]	**2.4**	**3.8**	**1.5**	**2.1**	**2.1**	**3.1**
Type of initial program						
Same	2.4	3.5	1.4	1.8	2.1	2.7
Different[3]	3.1	4.5	2.1	2.9	2.6	3.8

1. One year of full-time study is equivalent here to two full-time terms or eight part-time terms.
2. Refers to students who have interrupted their studies for at least six consecutive terms.
3. Refers to the total duration, including studies undertaken previously in other types of programs.

Graph 3.5

Cumulative school-leaving rates for regular college education between 1996-1997 and 2000-2001, by number of years elapsed since initial enrollment in a program leading to a DCS (%)



3.6 Success and Duration of Studies in Bachelor's Programs[1]

At the end of 2000-2001, 67.0% of students leaving a bachelor's program obtained their degree, that is, 2.5% more than the preceding year. In the 12-year period observed, the graduation rate increased from 55.9% for students enrolled for the last time in 1987-1988, reaching an all-time high in 2000-2001.

Of the students enrolled in a bachelor's program and leaving their program at the end of 2000-2001, two thirds (67%) obtained a degree.

From the beginning of the period under observation, female students have had higher success rates than male students, with the difference rising from 0.7 to 4.5 percentage points between 1987-1988 and 2000-2001, after a maximum gap of 7.7 percentage points in 1996-1997. In the last year observed, 68.9% of female students who left a bachelor's program did so with a degree, compared with 64.4% of their male counterparts. This phenomenon, coupled with the fact that more women than men enroll in bachelor's programs (see Section 2.10), explains the gender gap with respect to graduation rates (see Section 5.7).

Graduates of bachelor's programs have studied for an average of 6.4 full-time terms, or for 8.8 terms if full-time or part-time status is not taken into account.[2] Those who leave without a degree study an average of 2.6 terms, or slightly more than one year, full-time. For all students leaving bachelor's programs, the average duration of studies is 7.3 terms, 5.1 of which are full-time.

Differences in the duration of studies are apparent in the figures for men and women, and according to the status upon leaving. Whether women obtain a bachelor's degree or give up their studies without a degree, they do so sooner than

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1. Success in university bachelor's programs is measured here by the proportion of new graduates among all students leaving the programs with or without a degree. The degrees taken into account are bachelor's degrees obtained during or at the end of the school year in which the student was last enrolled, or the following year, if the student has not re-enrolled in an undergraduate program leading to a bachelor's degree. Students are considered to have left school without a degree when they have been absent for a period of at least two years following the last year of enrollment.
2. A portion of the studies is done part-time and is added to the average duration of full-time studies. For graduates, the duration of part-time studies varies from 2.2 to 2.5 terms. For those who leave without a degree, the duration of part-time studies is from 1.7 to 2.0 terms. For all school leavers, the duration of part-time studies varies from 2.0 to 2.4 terms.

men do. Women who obtain a bachelor's degree spend 0.6 fewer terms in full-time studies than men, while women who leave their program without a degree do so 0.5 terms sooner than men. Nevertheless, when the duration of studies is considered, regardless of full- or part-time status, the gender difference is not as pronounced, because more women than men study part-time. For all students leaving bachelor's programs, the gender difference is less evident, mainly because more women than men obtain a degree, which raises the average duration of studies for women overall.

Table 3.6a

Proportion of students graduating from a bachelor's program, by gender and last year of enrollment (%)

	1987-1988	1990-1991	1995-1996	1997-1998	1999-2000	2000-2001[e]
Male	55.5	59.7	61.7	62.7	62.5	64.4
Female	56.2	63.1	69.0	68.2	67.7	68.9
Total	**55.9**	**61.5**	**65.9**	**65.8**	**65.5**	**67.0**

e: Estimates

Table 3.6b

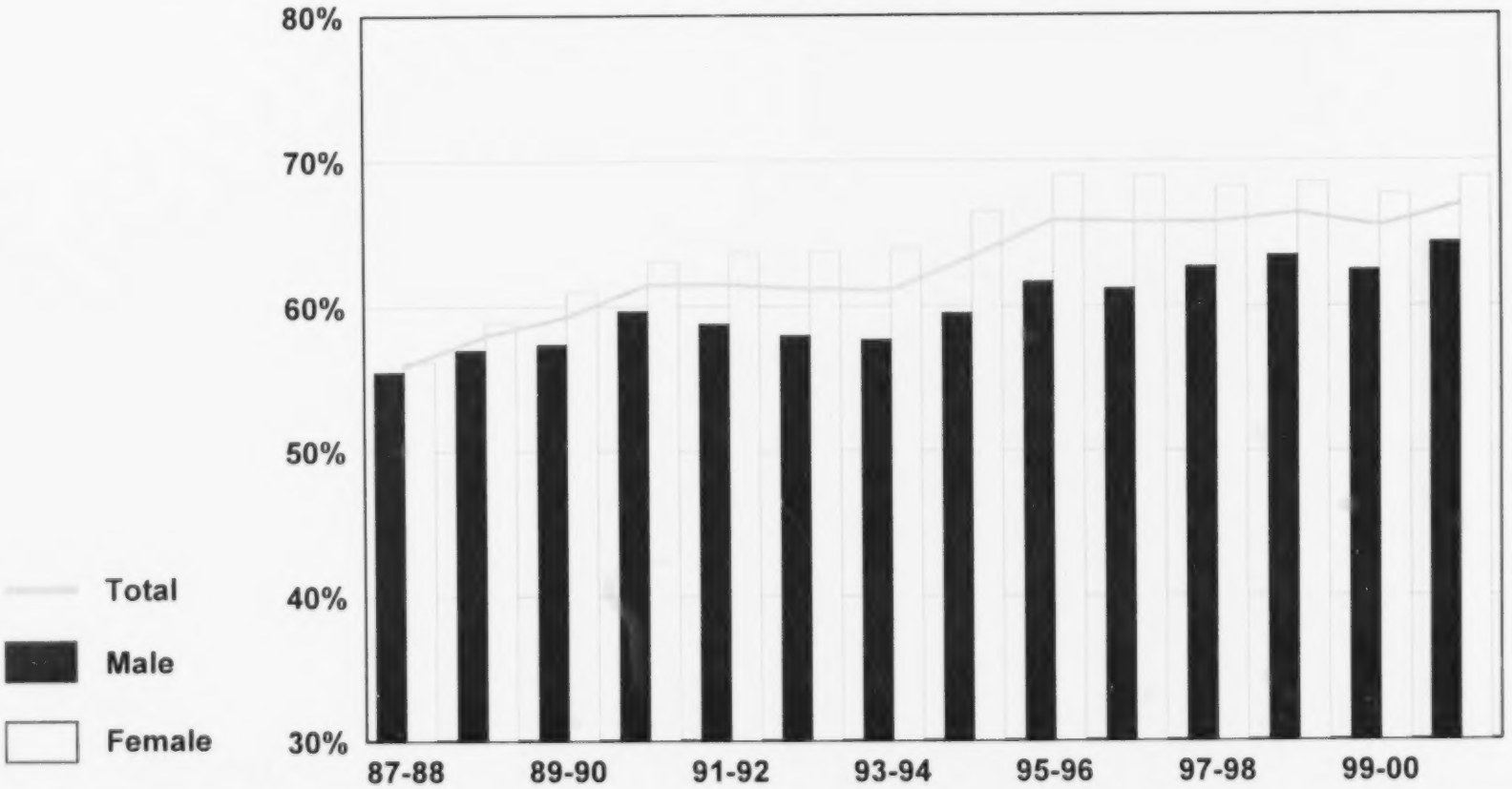
Average number of terms completed before leaving a bachelor's program (average for all leavers after 1995-1996), by gender

	With Degree		Without Degree[1]		Total	
	Full-time	All attendance statuses[2]	Full-time	All attendance statuses[2]	Full-time	All attendance statuses[2]
Male	6.7	9.0	2.9	4.5	5.2	7.3
Female	6.1	8.7	2.4	4.4	4.9	7.3
Total	**6.4**	**8.8**	**2.6**	**4.4**	**5.1**	**7.3**

1. Refers to students who have interrupted their studies for at least six consecutive terms.
2. Refers to the total duration of full- and part-time studies.

Graph 3.6

Proportion of students graduating from a bachelor's program, by gender and last year of enrollment (%)



3.7 Success and Duration of Studies in Master's Programs[1]

At the end of 2000-2001, 69.3% of students leaving a master's program obtained their degree. This is a gain of 13.2 percentage points over a 13-year period, as well as the highest level recorded for that period.

Of 100 students enrolled in a master's program and leaving their program at the end of 2000-2001, 69.3 obtained a degree, after an average of 7.7 terms of study.

In 1987-1988, relatively fewer women than men seeking a master's degree pursued their studies to graduation. Since then, women have taken the lead and now have a higher success rate than men. In 2000-2001, 71.1% of women leaving a master's program did so with a degree, for an increase of 16.1 percentage points since 1987-1988. The corresponding increase for men was 10.5 percentage points; 67.5% of men leaving a master's program did so with a degree in 2000-2001. This phenomenon, coupled with the fact that more women than men enroll in master's programs (see Section 2.10), explains the gender gap with respect to graduation rates (see Section 5.7).

Graduates of master's programs are enrolled for an average of 7.5 terms, regardless of whether they study on a full-time or part-time basis.[2] On average, students spend 4.1 terms in full-time studies. The total average duration of studies for students who leave without a degree is 5.2 terms, whether full-time or part-time. For all students leaving master's programs, the average duration of studies is 6.7 terms, 3.5 of which are full-time. The duration of studies referred to here is the actual duration and is not consistent with the calculation of full-time equivalents (FTEs) for funding purposes, where a standardized duration is generally recognized for a master's program with a thesis. In these cases, the "funded" duration is a maximum of 4 terms (1.5 years in FTEs) for master's programs. However, the actual

1. Success in university master's programs is measured here by the proportion of new graduates among all students leaving the programs with or without a degree. The degrees taken into account are master's degrees obtained during or at the end of the school year in which the student was last enrolled, or the following year, if the student has not re-enrolled in a graduate program leading to a master's degree. Students are considered to have left school without a degree when they have been absent for a period of at least two years following the last year of enrollment.
2. A portion of the studies is done part-time and is added to the average duration of full-time studies. For graduates, the duration of part-time studies varies from 3.2 to 4.0 terms. For those who leave without a degree, the duration of part-time studies is from 2.7 to 3.3 terms. For all school leavers, the duration of part-time studies varies from 3.0 to 3.8 terms.

duration of studies exceeds this standard for all types of status. This means that students who leave without a master's degree are in practice fully funded, with the exception of a supplementary amount of $1 000 that is allocated to universities when the degree is awarded.

Differences in the duration of studies are apparent in the figures for men and women, and according to the status upon leaving. Contrary to what was observed at the college level and in bachelor's programs, women enrolled in master's programs do not take less time than men to obtain their degree. If full-time enrollment only is considered, women certainly leave sooner (with or without a diploma) than men, but women with a master's degree have studied part-time for 0.3 terms more than men, and women who leave without a master's degree were enrolled part-time for 3.0 terms, compared with 2.7 terms for their male counterparts.

Table 3.7a

Proportion of students graduating from a master's program, by gender and last year of enrollment (%)

	1987-1988	1990-1991	1995-1996	1997-1998	1999-2000	2000-2001[e]
Male	57.0	64.4	63.7	64.3	65.7	67.5
Female	55.0	64.5	67.5	67.9	69.0	71.1
Total	**56.1**	**64.5**	**65.6**	**66.1**	**67.4**	**69.3**

e: Estimates

Table 3.7b

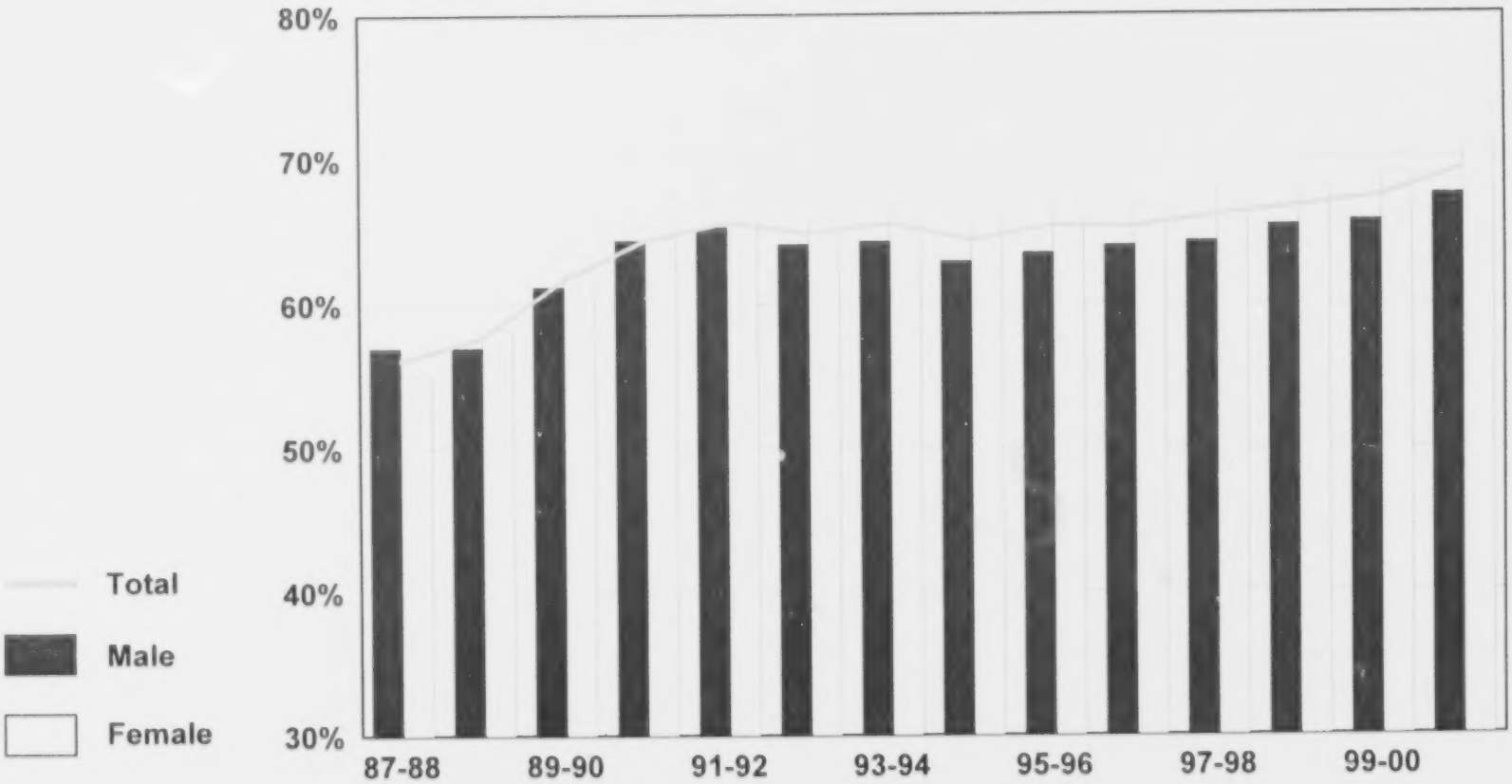
Average number of terms completed before leaving a master's program (average for all leavers after 1995-1996), by gender

	With Degree		Without Degree[1]		Total	
	Full-time	All attendance statuses[2]	Full-time	All attendance statuses[2]	Full-time	All attendance statuses[2]
Male	4.2	7.4	2.4	5.1	3.5	6.6
Female	4.1	7.6	2.2	5.2	3.5	6.8
Total	**4.1**	**7.5**	**2.3**	**5.2**	**3.5**	**6.7**

1. Refers to students who have interrupted their studies for at least six consecutive terms.
2. Refers to the total duration of full- and part-time studies.

Graph 3.7

Proportion of students graduating from a master's program, by gender and last year of enrollment (%)



3.8 Success and Duration of Studies in Doctoral Programs[1]

At the end of 2000-2001, 53.3% of students leaving a doctoral program obtained their degree. Since 1987-1988, this proportion has increased by 4.6 percentage points, but has also dropped from its high of 58.1% in 1996-1997.

For the first time in 2000-2001, more women enrolled in doctoral programs obtained their degree than their male counterparts (55.2% compared with 51.7%).

Although traditionally fewer women than men in doctoral programs have obtained their degree, for the first time in 2000-2001, more women enrolled in doctoral programs obtained their degree than their male counterparts. Of the women enrolled in 2000-2001 who left doctoral programs, 55.2% obtained their degree, for an increase of 14.9 percentage points compared with 13 years earlier. For men, the graduation rate decreased by 1.4 percentage points during the same period and the proportion of male candidates who completed their studies in 2000-2001 with a degree was 51.7%, or 3.5 percentage points less than for female candidates. For women, success rates have been steadily rising, while for men, they have been in decline since 1995-1996. This phenomenon offsets the fact that more men than women enroll in doctoral programs (see Section 2.10), but there are still more men than women who obtain doctoral degrees (see Section 5.7).

Graduates of doctoral programs are enrolled for an average of 15.9 terms, regardless of whether they study on a full-time or part-time basis.[2] On average, students spend 11.9 terms in full-time studies. Those who leave without a degree study for 9.4 terms, whether full-time or part-time. For students overall, whether they leave a doctoral program with or without a degree, they do so after 12.9 terms, of which 9.4 are full-time. The duration of studies referred to here is the

1. Success in university doctoral programs is measured here by the proportion of new graduates among all students leaving the programs with or without a degree. The degrees taken into account are doctorates obtained during or at the end of the school year in which the student was last enrolled, or the following year, if the student has not re-enrolled in a post-graduate program leading to a doctorate. Students are considered to have left school without a degree when they have been absent for a period of at least two years following the last year of enrollment.
2. A portion of the studies is done part-time and is added to the average duration of full-time studies. For graduates, the duration of part-time studies varies from 3.4 to 5.4 terms. For those who leave without a degree, the duration of part-time studies is from 2.6 to 3.5 terms. For all school leavers, the duration of part-time studies varies from 3.1 to 4.4 terms.

actual duration and is not consistent with the calculation of full-time equivalents (FTEs) for funding purposes, where only a standardized duration is recognized. The "funded" duration is a maximum of 8 terms (3 years in FTEs) for doctoral programs. However, the actual duration of studies exceeds this standard for all types of status. This means that students who leave without a doctorate are in practice fully funded, with the exception of a supplementary amount of $7 000 that is allocated to universities when the degree is awarded.

Differences in the duration of studies are apparent in the figures for men and women, and according to the status upon leaving. Contrary to what was observed at the college level and in bachelor's programs, women enrolled in doctoral programs do not take less time than men to obtain their degree or to leave without one. If full-time enrollment only is considered, women certainly leave sooner (with or without a diploma) than men, but women with a doctorate have studied part-time for 1.7 terms more than men, and women who leave without a doctorate were enrolled part-time for 3.3 terms, compared with 2.7 terms for their male counterparts.

Table 3.8a

Proportion of students graduating from a doctoral program, by gender and last year of enrollment (%)

	1987-1988	1990-1991	1995-1996	1997-1998	1999-2000	2000-2001[e]
Male	53.1	55.5	60.9	57.3	55.7	51.7
Female	40.3	46.7	48.4	49.0	51.8	55.2
Total	**48.7**	**52.3**	**56.3**	**54.1**	**54.1**	**53.3**

e: Estimates

Table 3.8b

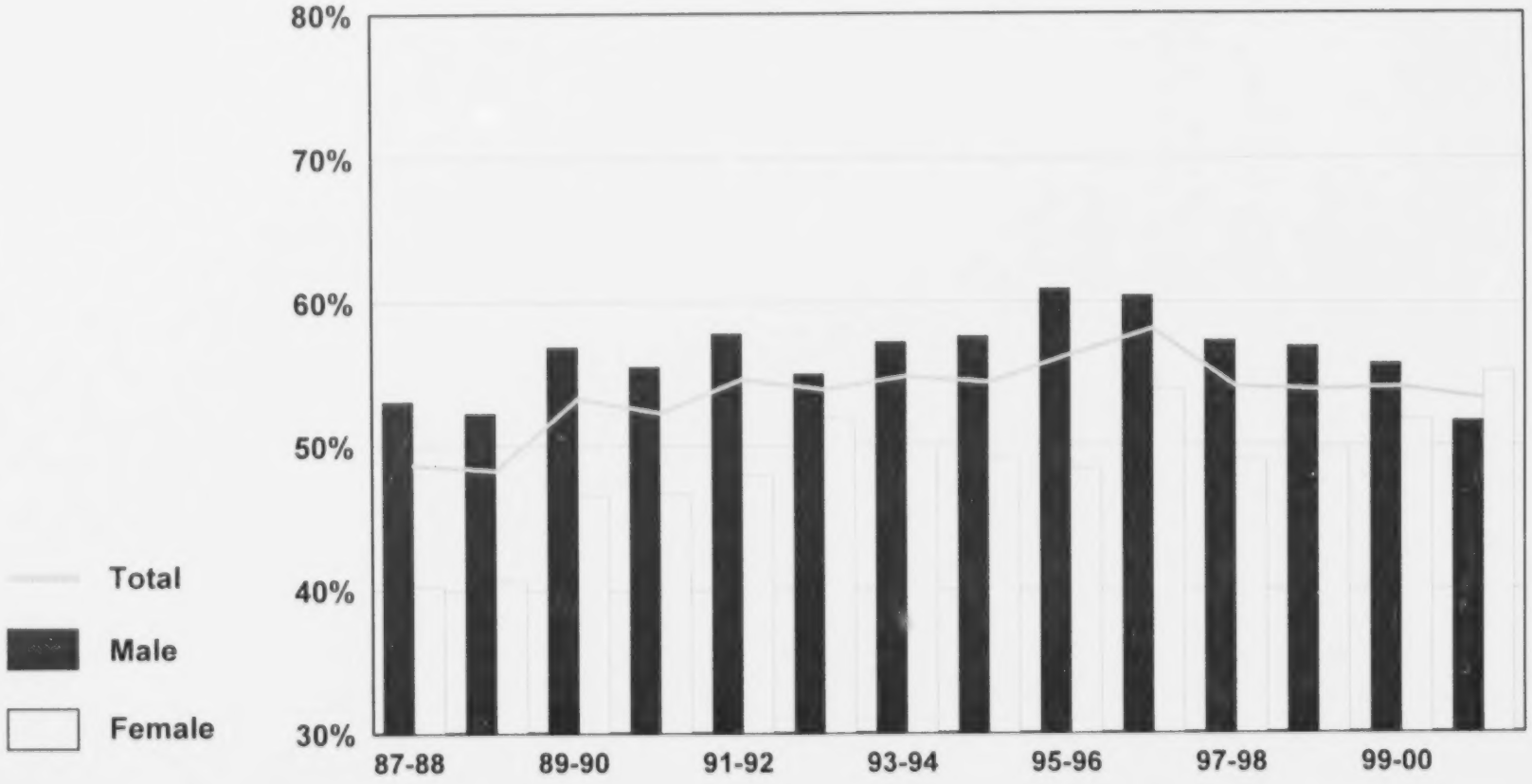
Average number of terms completed before leaving a doctoral program (average for all leavers after 1995-1996), by gender

	With Degree		Without Degree[1]		Total	
	Full-time	All attendance statuses[2]	Full-time	All attendance statuses[2]	Full-time	All attendance statuses[2]
Male	12.1	15.4	6.8	9.5	9.7	12.8
Female	11.7	16.7	6.0	9.3	8.9	13.1
Total	**11.9**	**15.9**	**6.4**	**9.4**	**9.4**	**12.9**

1. Refers to students who have interrupted their studies for at least six consecutive terms.
2. Refers to the total duration of full- and part-time studies.

Graph 3.8

Proportion of students graduating from a doctoral program, by gender and last year of enrollment (%)



4.1 Secondary School Examination Results, by Several Variables–Youth Sector

The success rate on the Ministère's June 2002 secondary school uniform examinations was 85.1%. Overall, female students obtained higher marks than male students.

The Ministère de l'Éducation administers uniform examinations to students in Secondary IV and V for purposes of certification. The average result for the June 2002 examinations was 73.4%,[1] and the success rate was 85.1%.

While female students have a much better record than male students for staying in school, they have no clear advantage over male students with regard to the results obtained on uniform examinations. This may be because of the higher dropout rate among male students, for it is usually the weaker students who leave school before graduation.

The average mark obtained by students in private schools was 8.7 percentage points higher than the average mark obtained in the public system. The success rate was 83.0% in the public system, compared with 95.0% in the private system. One of the factors likely to explain these differences[2] is that private schools can impose selection criteria for admitting students.

Students who received instruction in French obtained better results on the examinations than students who studied in English. The average mark of students studying in French was 3.5 percentage points higher than that of students studying in English; the success rate of students studying in French was 4.2 percentage points higher than that of students studying in English.

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1. This figure is calculated on the basis of the students' final marks. The final mark is made up, in equal proportions, of the student's result on the uniform examination and the "moderated" school mark. "Moderation" is a procedure which renders the marks assigned by different schools comparable by using the results of the uniform examination for each student group as the basis of comparison.
2. "The performance disadvantage observed in public schools largely disappeared after other school factors were taken into consideration. . . . In other words, after taking the effect of other school characteristics into consideration, including school average parental SES, public school attendance was associated with higher individual performance." See *Measuring Up: The Performance of Canada's Youth in Reading, Mathematics and Science—OECD PISA Study: First Results for Canadians Aged 15*, (Ottawa: Statistics Canada, No. 81-590-XPE, December 2001, p. 44).

The best results were obtained in the second language, and the poorest, in mathematics, history and language of instruction.

Female students outperformed male students in French, language of instruction, English, language of instruction, and French, second language. In the other subjects, there was little difference.

Table 4.1

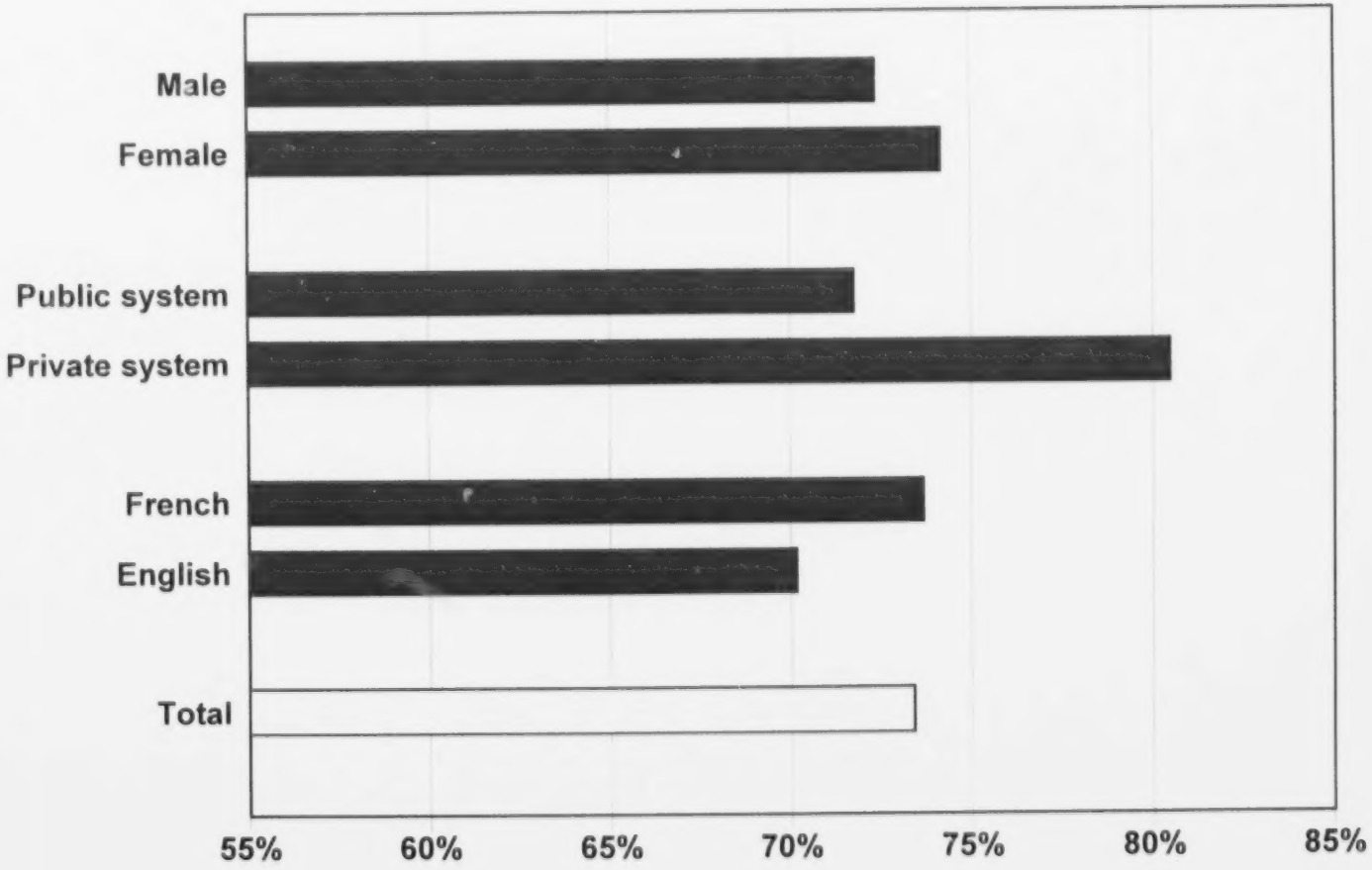
Results on secondary school uniform examinations in the youth sector, by gender, school system, language of instruction and subject: June 2002 (%)

	Average	Success Rate
Male	72.4	83.9
Female	74.2	86.2
Public system[1]	71.8	83.0
Private system	80.5	95.0
Language of instruction: French	73.7	85.5
Language of instruction: English	70.2	81.3
English, language of instruction (Secondary V)	72.5	94.0
English, second language (Secondary IV)	76.0	84.9
English, second language (Secondary V)	82.2	95.5
French, language of instruction (Secondary V)	71.3	89.6
French, second language (Secondary V)	74.6	91.0
History (Secondary IV)	68.8	77.0
Physical Science 416 (Secondary IV)	74.8	86.4
Mathematics 436 (Secondary IV)	69.8	78.9
Total	**73.4**	**85.1**

1. Excludes the Cree School Board, the Kativik School Board and institutions outside the jurisdiction of the Ministère de l'Éducation.

Graph 4.1

Results on secondary school uniform examinations in the youth sector, by gender, school system and language of instruction: June 2002 (%)



4.2 Regional Disparities in Secondary School Examination Results–Youth Sector

Six administrative regions recorded higher averages and success rates than the overall provincial results on the Ministère de l'Éducation's June 2002 uniform examinations.[1] These regions are Montréal, Montérégie, Mauricie, Estrie, Capitale-Nationale and Laval. Ranked among the lowest were Gaspésie–Îles-de-la-Madeleine, Saguenay–Lac-Saint-Jean, Côte-Nord and Nord-du-Québec.

The results on the Ministère's June 2002 uniform examinations showed a difference of 13.7 percentage points between the success rates of students in the region with the best performance (86.9%) and in the region with the poorest performance (73.2%).

Regional disparities changed little from 2001 to 2002. The difference between the highest and lowest average marks remained at 8.6 percentage points, while the gap in the success rates increased from 13.5 to 13.7 percentage points.

The results on uniform examinations are not necessarily indicative of the probability of obtaining a secondary school diploma. In some regions, it is possible that a low student retention rate contributes to higher marks on the uniform examinations because the weakest students have dropped out.

1. Results are calculated on the basis of the students' final marks. The final mark is made up, in equal proportions, of the student's result on the uniform examination and the "moderated" school mark. "Moderation" is a procedure which renders the marks assigned by different schools comparable by using the results of the uniform examination for each student group as the basis of comparison.

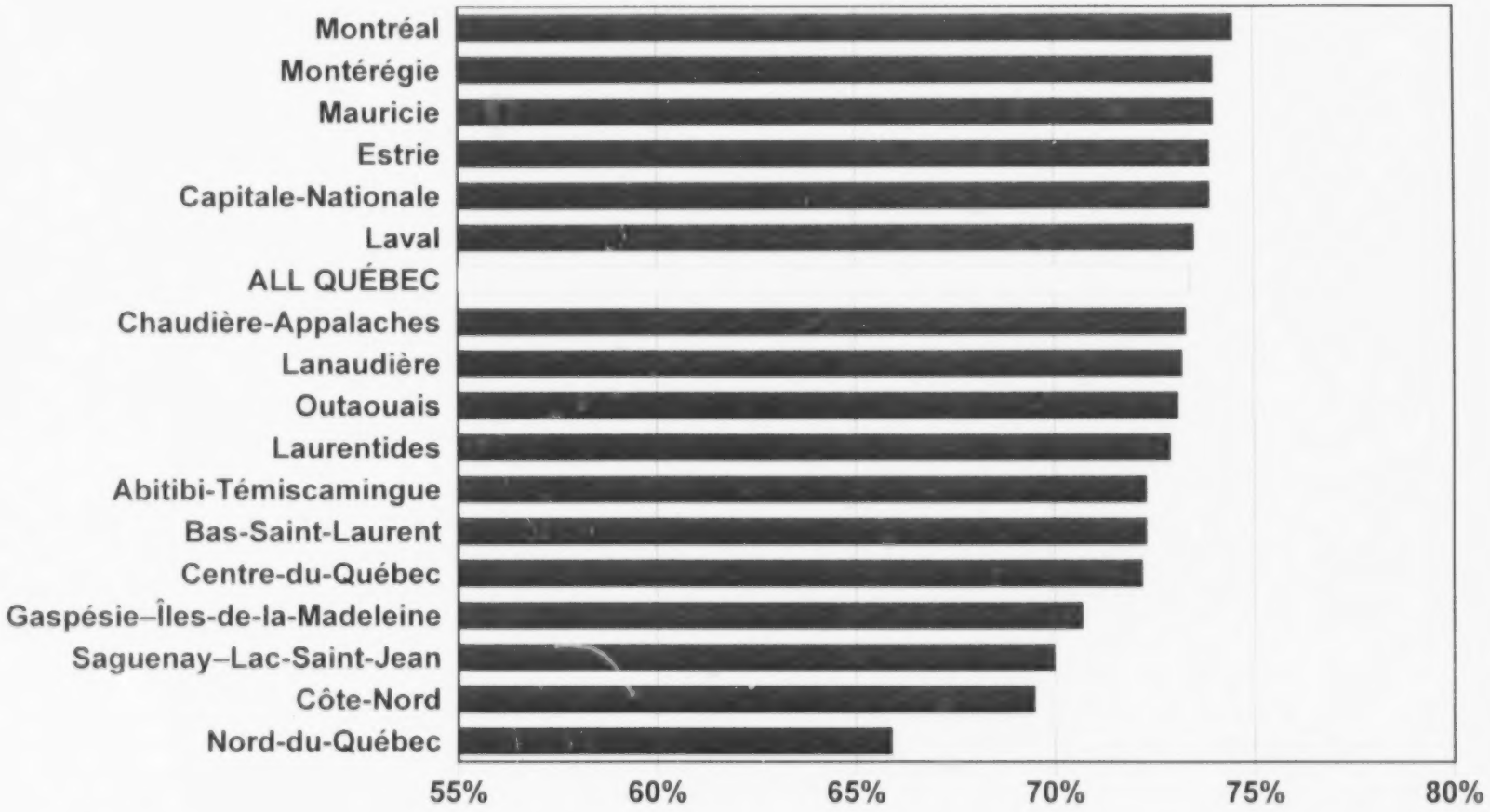
Table 4.2

Results on secondary school uniform examinations in the youth sector, by school administrative region: June 2002 (%)

School Administrative Region	Average	Success Rate
Gaspésie–Îles-de-la-Madeleine	70.7	81.5
Bas-Saint-Laurent	72.3	84.1
Saguenay–Lac-Saint-Jean	70.0	80.0
Capitale-Nationale	73.9	86.0
Chaudière-Appalaches	73.3	86.2
Mauricie	74.0	86.9
Centre-du-Québec	72.2	84.0
Estrie	73.9	86.5
Montérégie	74.0	86.3
Montréal	74.5	85.6
Laval	73.5	85.1
Lanaudière	73.2	84.8
Laurentides	72.9	85.1
Outaouais	73.1	83.3
Abitibi-Témiscamingue	72.3	84.8
Côte-Nord	69.5	78.5
Nord-du-Québec	65.9	73.2
Total	**73.4**	**85.1**

Graph 4.2

Average results on secondary school uniform examinations in the youth sector, by school administrative region: June 2002 (%)



4.3 Secondary V French, Language of Instruction, Examination–Youth Sector

Students who took the June 2002 Secondary V French, language of instruction, examination obtained an average mark of 71.3%; the success rate was 89.6%.[1]

The success rate on the Ministère's June 2002 Secondary V French, language of instruction, examination was 89.6%. Female students obtained significantly higher marks than male students.

The examination consisted of three components: written production, a reading comprehension exercise and an oral expression test. The reading comprehension and oral expression components were under the responsibility of the educational institutions. The results obtained in these sections are not included in Table 4.3; however, they were considered in the calculation of the overall results on the French examination. In written production, which was under the responsibility of the Ministère de l'Éducation, students obtained an average of 71.7%; the success rate was 81.2%.

Whereas there was no significant difference overall between the results obtained by male and female students on the examinations used for purposes of certification, female students outperformed male students on the French examination. The average for female students was 5.9 percentage points above that for male students, and the success rate was 9.2 percentage points in favour of female students. In written production, the female students' average was 6.1 percentage points higher than the male students' and their success rate was 11.0 percentage points higher.

The average obtained by private school students surpassed that of public school students by 5.4 percentage points. In the public system, 12.0% of the students failed the ministry examination, compared with 3.8% in the private system. In written production, students in private schools scored 5.5 percentage points higher than students in the public system.

1. Results are calculated on the basis of the students' final marks. The final mark is made up, in equal proportions, of the student's result on the uniform examination and the "moderated" school mark. "Moderation" is a procedure which renders the marks assigned by different schools comparable by using the results of the uniform examination for each student group as the basis of comparison.

Table 4.3

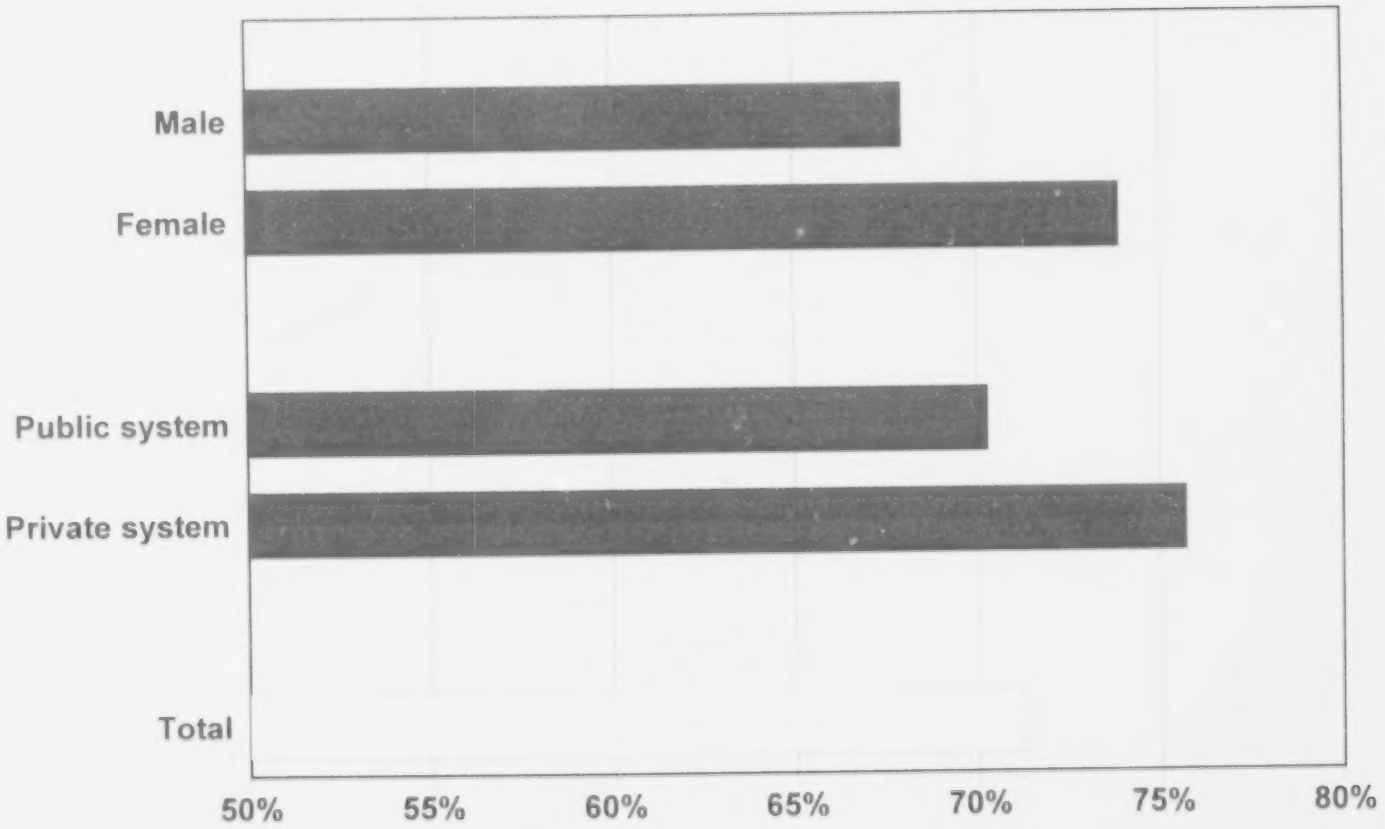
Results on the Secondary V French, language of instruction, examination in the youth sector, by gender and school system: June 2002 (%)

	Written Production		Overall Results	
	Average	Success Rate	Average	Success Rate
Male	68.4	75.2	68.0	84.5
Female	74.5	86.2	73.9	93.7
Public system[1]	70.7	79.2	70.3	88.0
Private system	76.2	89.9	75.7	96.2
Total	**71.7**	**81.2**	**71.3**	**89.6**

1. Excludes the Cree School Board, the Kativik School Board and institutions outside the jurisdiction of the Ministère de l'Éducation.

Graph 4.3

Average results on the Secondary V French, language of instruction, examination in the youth sector, by gender and school system: June 2002 (%)



4.4 Mathematics Achievement of 13-Year-Olds

More than 3 000 13-year-old Québec students participated in the mathematics assessments administered in the spring of 2001 by the Council of Ministers of Education, Canada, as part of the School Achievement Indicators Program (SAIP). The students were in the first year of secondary school in most of the education systems across the country.

In the spring of 2001, Québec 13-year-olds obtained slightly better results than Canadian students as a whole on two mathematics assessments, although the gap has narrowed since 1997.[1]

Each student in the sample was given one of two assessment components designed to evaluate either mathematics content or problem-solving skills. The results were expressed on a five-level scale. For example, level 1 represented the knowledge and skills expected of elementary school students; level 2, the knowledge and skills expected of Secondary I students; and level 5, those expected of students who had completed an advanced mathematics course.

On both assessments, nine out of ten Québec students attained the first level of achievement, while three quarters attained level 2.[2] Nearly four out of ten students attained level 3 in mathematics content, while almost three out of ten attained this level in problem solving. Francophone students significantly outperformed anglophone students in mathematics content at level 2 (74.9% compared with 66.6%) and level 3 (39.2% compared with 35.1%). More anglophone students than francophone students, however, attained level 1 in problem solving (90.4% compared with 87.7%). For the first three levels in both assessments, francophone female students did better than their male counterparts. Among anglophone students, more male students attained the first three levels in mathematics content, while more female students attained the first three levels in problem solving.

More Québec students reached levels 2 and 3 in both assessments than their counterparts in the other provinces and territories. However, more students in Alberta attained level 1 in mathematics content (90.7%), followed by anglophone

1. The 2001 SAIP evaluation was updated in the light of new research and current program development policies and teaching practices. All changes were subjected to pilot studies and thorough field testing.
2. The comparisons of results in this section take into account a margin of error inherent in any result obtained by surveying a sampling of persons.

students in Ontario (90.3%) and francophone students in Nova Scotia (90.0%). Francophone students in Québec ranked fourth, with 89.7%. More anglophone students in Québec reached level 1 in problem solving (90.4%), followed by students in Alberta (90.3%) and francophone students in Manitoba (89.0%).

Fewer Québec students achieved level 1 in mathematics content in 2001 than in 1997, (92.9% compared with 89.7% for francophone students and 90.8% compared with 88.2% for anglophone students). The same was true for levels 2 and 3, with the exception of anglophone students, who did 1.3% better at level 2. The results were different for the problem-solving component: more anglophone students achieved level 1 (85.0% compared with 90.4%), while fewer francophone students did so (90.7% compared with 87.7%). Both groups of Québec students did better at the other levels. Overall, the gap between the results of Québec students and students in Canada as a whole decreased.

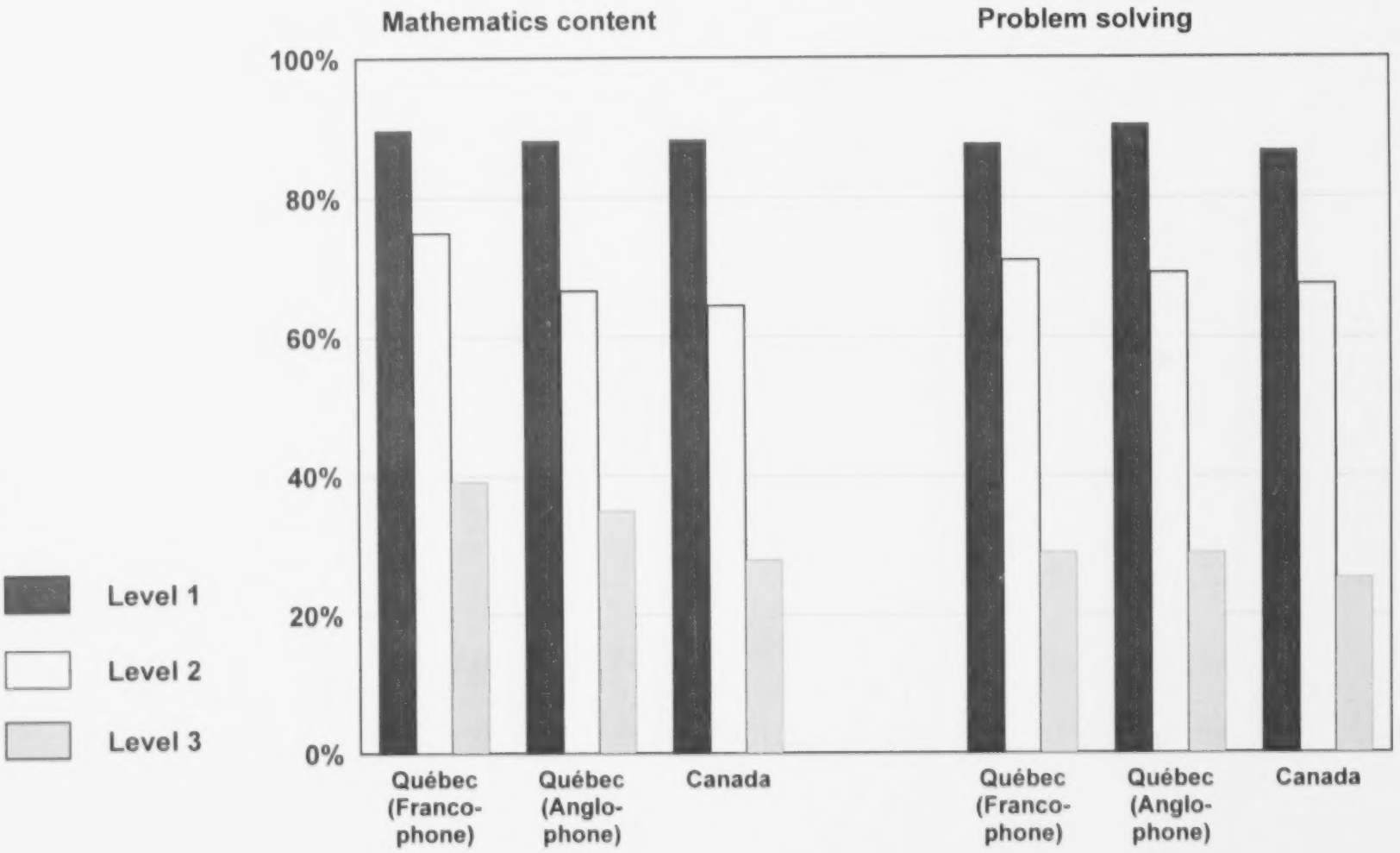
Table 4.4

Proportion of 13-year-old students who attained the first three levels of achievement on SAIP mathematics assessments, 2001 (%)

	Assessment–Level of achievement					
	Mathematics content			Problem solving		
	1	2	3	1	2	3
British Columbia	86.9	60.7	24.8	85.0	63.6	23.1
Alberta	90.7	70.6	33.1	90.3	76.5	31.9
Saskatchewan	82.7	52.1	17.7	83.4	60.8	16.2
Manitoba (Anglophone)	83.8	57.2	21.4	82.6	60.4	21.9
Manitoba (Francophone)	88.5	59.2	24.1	89.0	71.1	28.5
Ontario (Anglophone)	90.3	63.4	25.3	88.0	68.7	25.1
Ontario (Francophone)	84.8	56.3	24.8	86.7	68.8	25.6
Québec (Anglophone)	**88.2**	**66.6**	**35.1**	**90.4**	**69.2**	**29.0**
Québec (Francophone)	**89.7**	**74.9**	**39.2**	**87.7**	**71.0**	**29.0**
New Brunswick (Anglophone)	82.3	51.9	18.7	82.1	57.9	17.7
New Brunswick (Francophone)	83.8	57.6	23.4	87.4	65.5	26.5
Nova Scotia (Anglophone)	81.8	47.7	11.6	77.3	50.9	13.7
Nova Scotia (Francophone)	90.0	48.5	18.5	88.0	57.8	15.7
Prince Edward Island	80.5	52.7	12.2	80.8	51.8	15.7
Newfoundland	81.8	57.1	21.3	80.0	58.2	22.1
Northwest Territories	67.8	40.5	13.9	55.8	32.9	8.2
Nunavut	27.8	8.0	3.0	9.3	2.3	0.6
Yukon	80.8	52.5	18.2	81.5	63.7	15.1
Québec	89.6	74.1	38.8	88.0	70.8	29.0
Canada	**88.3**	**64.4**	**27.9**	**86.7**	**67.6**	**25.4**

Graph 4.4

Proportion of 13-year-old students in each level of achievement on the SAIP mathematics assessments: Québec and Canada (%)



4.5 Ministerial Examination of College French

In 2001-2002, 41 122 college students wrote the ministerial examination of college French, language of instruction and literature.

In 2001-2002, the success rate on the ministerial examination of college French was 84.3%.

Since January 1, 1998,[1] students in French CEGEPs must pass this examination to obtain a Diploma of College Studies (DCS). The students must read a series of texts and write an essay on one of them, thereby demonstrating their ability to understand a variety of texts and produce a structured essay using correct language.

The examination consists in writing a 900-word critical essay based on the texts provided. There are three major evaluation criteria: I-Comprehension and insight; II-Organization of response; and III-Expression. The first two criteria contain specific subcriteria that are evaluated using a seven-level rating scale: A (very good), B (good), C+ (fair), C (adequate), D (weak), E (very poor) and F (unacceptable). In the Expression criterion, the "appropriate use of words" subcriterion is evaluated using the same rating scale, while sentence structure, punctuation, spelling and grammar are evaluated quantitatively, by counting errors. Students must obtain a C or better for each of the three major criteria. A grade of C represents an adequate level of competence. Therefore, students who obtain a D or worse on any one of the three criteria automatically fail the examination.

The overall success rate for the ministerial examination of college French was 84.3%, slightly higher than the rate observed in 2000-2001. This improvement can be explained by a better success rate for the first criterion, Comprehension and insight.

The best results were obtained in Organization of response, on which 49.1% of students received an A. Good results were also obtained in Comprehension and insight, on which 55.6% of students received a B. The results for the third criterion, Expression, were not as good: only 86.1% of students passed this criterion, 41.1% of them with a C.

1. This requirement has been postponed until January 1, 2003, for students who have passed at least one language literature course in the old system.

The success rate for women was 86.8%, compared with 80.5% for men. These rates are better than those observed in 2000-2001. However, the improvement was somewhat more marked among men than among women.

Students enrolled in pre-university programs leading to a DCS recorded a success rate of 90.7%, while students enrolled in technical programs leading to a DCS achieved a success rate of 78.1%. In both cases, the results are better than those observed in 2000-2001. The greatest improvement was among students enrolled in technical programs (1.2 percentage points).

Table 4.5a

Success rate for the ministerial examination of college French, by gender and type of program (%)

	Success Rate			
	1998-1999	1999-2000	2000-2001	2001-2002
Female	90.8	90.7	86.4	86.8
Male	85.4	84.4	79.9	80.5
Pre-university education (DCS)	93.2	93.1	90.3	90.7
Technical education (DCS)	83.3	82.7	76.9	78.1
Overall examination	**88.6**	**88.1**	**83.7**	**84.3**

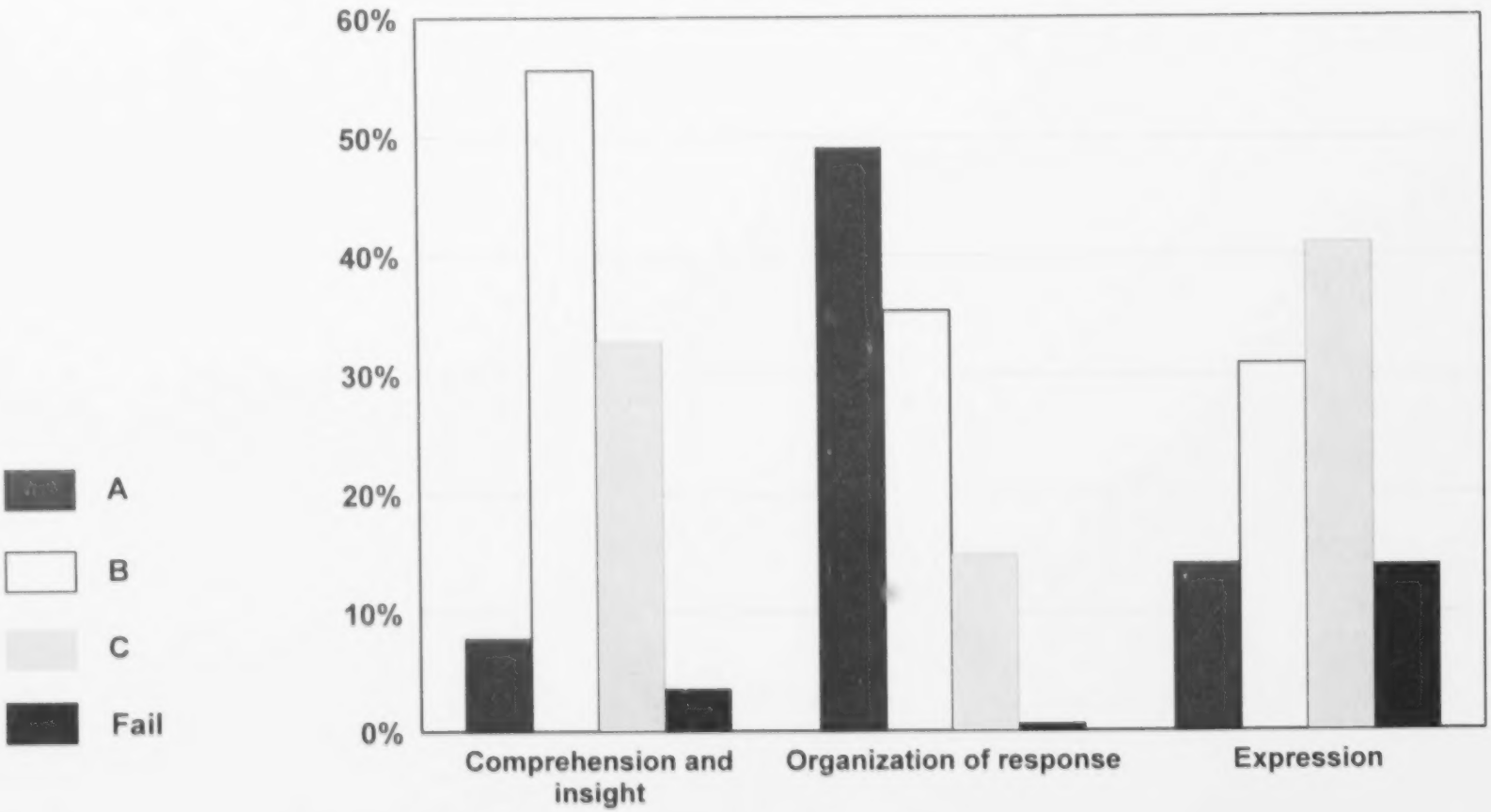
Table 4.5b

Distribution of students according to the grade obtained on each criterion of the ministerial examination of college French, 2001-2002 (%)

Criteria for the 2001-2002 examination	Distribution of students (%)				Success Rate
	A	B	C	Fail	
Comprehension and insight	7.9	55.6	32.8	3.6	96.4
Organization of response	49.1	35.3	14.9	0.6	99.4
Expression	14.1	30.9	41.1	13.9	86.1

Graph 4.5

Distribution of students according to the grade obtained on each criterion of the ministerial examination of college French, 2001-2002



5.1 Highest Diploma or Degree Earned

The main data pertaining to diplomas obtained at the various levels of education appears in the diagram in the Introduction and is presented in more detail in the following sections. Organized in a different way,[1] this data may also show the distribution of a cohort of school leavers according to the highest diploma earned.[2]

In 2000-2001, 61.1% of those leaving the education system graduated with a bachelor's degree or a diploma in vocational or technical education.

Between 1975-1976 and 2000-2001, graduation rates at the secondary and university levels rose rapidly for both men and women. The increase in the proportion of new graduates with bachelor's degrees (from 14.9% to 25.6%) was accompanied, at the other extreme, by a drop of more than one half in the proportion of those leaving school without a diploma (from 43.0% to 17.6%). This decline has resulted in a significant increase in all the other categories.

Thus, the proportion of school leavers who are not prepared for the labour market, that is, persons without a diploma or with only a Secondary School Diploma (SSD) in general education or a pre-university Diploma of College Studies (DCS) (including DCSs without mention) dropped from 63.2% in 1975-1976 to 38.9% in 2000-2001. This decline of 24.3 percentage points is reflected by increases of 10.7 percentage points in the proportion of graduates with a bachelor's degree and 13.6 percentage points in the proportion of holders of vocational or technical education diplomas (9.0 and 4.6 percentage points, respectively).

---

1. It is assumed that the diplomas awarded at a given level are preceded by a diploma at a lower level. For example, the number of bachelor's degrees should be a subset of the number of DCSs; it follows that the surplus of DCSs in relation to the bachelor's degrees would represent the number of DCSs that are not followed by a university degree. For this reason, there are no persons with a DCS in pre-university education or without mention of vocational specialty as a last diploma in 1975-1976 and 1995-1996. An additional hypothesis makes it possible to estimate the number of DCSs in technical education that are followed by a bachelor's degree. It is also assumed that secondary vocational education diplomas are not followed by another higher-level diploma. Partial studies at a given level are grouped with the diploma immediately below: for example, uncompleted college studies are considered with the SSDs in general education.
2. This level of schooling is different from the level for the general population as indicated in the census, the latter being primarily a historical reflection of all the generations in question. The level measured here is the schooling for persons currently leaving the education system. It also shows what the general state of schooling would be if current trends were to continue.

A glance at the situation according to gender highlights the disparities already observed in the schooling of men and women. In 2001, one and a half times more women than men graduated with a bachelor's degree or with a college diploma in technical education (45.7% compared with 30.0%), while roughly half as many women as men left school without a diploma (10.8% compared with 23.9%).

Table 5.1

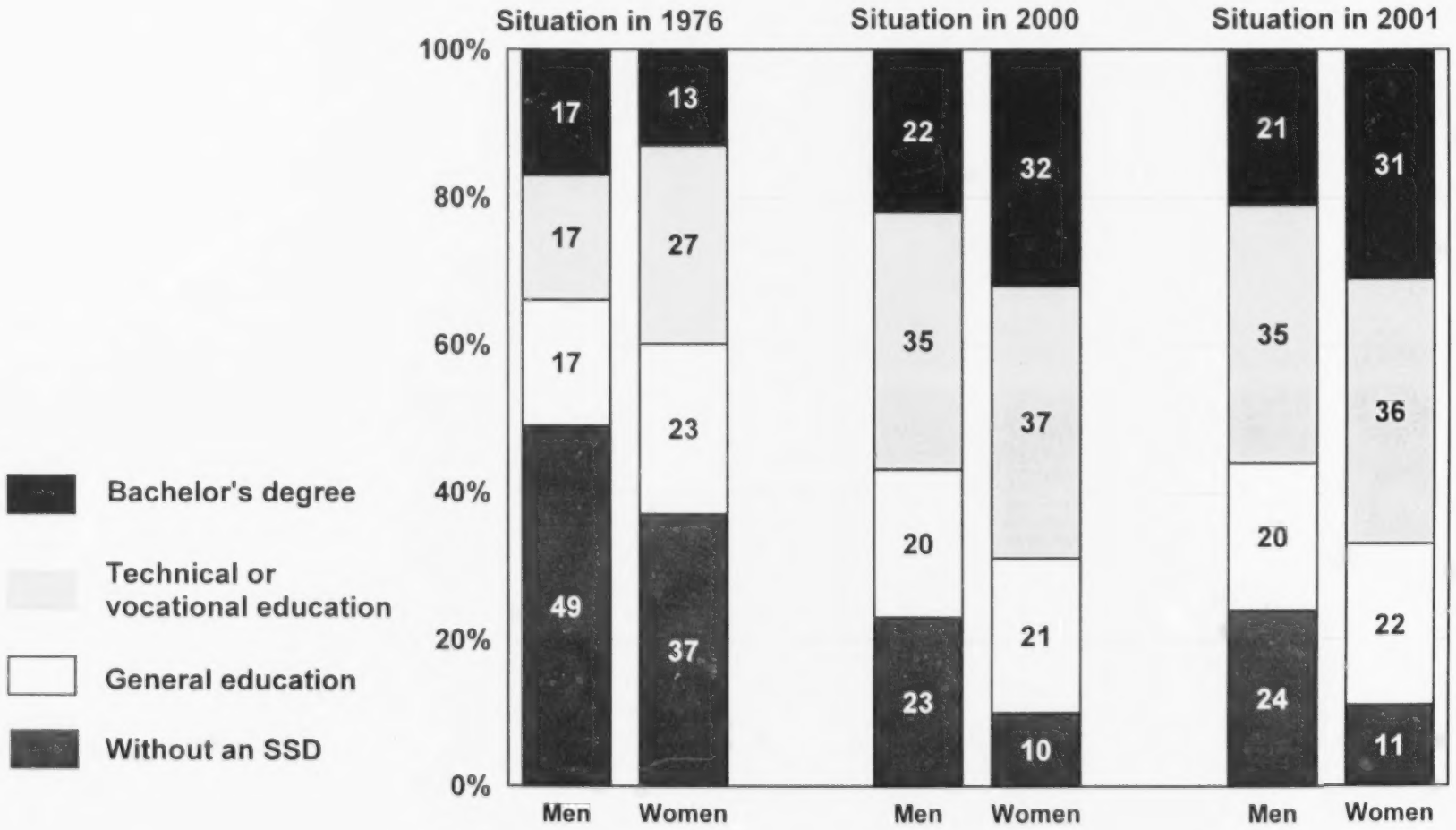
Distribution of school leavers, by highest diploma or degree earned (%)

	1975-1976	1985-1986	1990-1991	1995-1996	1999-2000	2000-2001
Bachelor's degree[1]	14.9	19.0	23.6	29.0	26.6	25.6
College diploma in technical education[2]	7.4	11.2	10.4	11.2	11.8	12.0
Secondary vocational education diploma[3]	14.5	17.7	13.7	19.4	24.5	23.5
General education (DCS or SSD)	20.2	31.3	29.1	28.6	20.2	21.3
No diploma	43.0	20.8	23.2	11.8	16.9	17.6
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

1. Figures for university are based on the calendar year in which the school year ends.
2. The diplomas considered here are the Diploma of College Studies (DCS) in technical education, the Attestation of College Studies (ACS) until 1984, the Certificat d'études collégiales (CEC–certificate of college studies) and the Diplôme de perfectionnement de l'enseignement collégial (DPEC–diploma of advanced college studies).
3. The diplomas considered here are the Short Vocational Diploma, the Long Vocational Diploma, the Secondary School Vocational Certificate (SSVC), the Diploma of Vocational Studies (DVS–known as the Secondary School Vocational Diploma [SSVD] prior to 1998), the Attestation of Vocational Specialization (AVS), the Attestation of Vocational Education (AVE) and other secondary school diplomas (SSDs) with mention of vocational specialty.

Graph 5.1

Distribution of school leavers, by highest diploma or degree earned (%)



5.2 Graduation From Secondary School–Youth and Adult Sectors

The probability of obtaining a secondary school diploma[1] in 2001-2002 was 81.1%, that is, a drop from 2000-2001. This is the lowest figure observed in a decade.

In 2001-2002, the probability of obtaining a first secondary school diploma in the youth or adult sector was 81.1%.

The decrease in enrollment in Secondary IV and V (see Section 2.3), despite a slight increase in enrollment in general education in the adult sector (see Section 2.5) appears to indicate that the probability of obtaining a secondary school diploma will be the same or slightly lower next year.

In 2001-2002, for students in the youth sector and under 20 years of age in the adult sector in Québec, the probability of obtaining a secondary school diploma was 68.3%, which is almost 3 percentage points lower than the level observed the previous year. The Ministère's objective is to reach a rate of 85% by the year 2010.

The graduation rate discussed here applies primarily to general education. As indicated in Section 5.4, the graduation rate for vocational education actually rose in 2001-2002, although not enough to compensate for the decrease in the graduation rate in general education. The present section is primarily concerned with the first diplomas obtained.[2] It is interesting to note that in 2001-2002, 89.4% of all the diplomas earned were first diplomas obtained in general education. This proportion was 97.4% if only diplomas obtained in the youth sector or by students under 20 years of age in the adult sector are considered.

The temporary slump in the graduation rate between 1986 and 1990 was largely due to the raising of the pass mark from 50% to 60%, which has made the diploma more valuable, yet more difficult to obtain. Students seem to have overcome this obstacle since 1989, and the graduation rate continued to rise for a number of years. As noted,

1. The probability of obtaining a first secondary school diploma is determined by grouping the first diplomas obtained at the secondary level in general and vocational education. This indicator is a measure of the proportion of a generation that stays in school until a secondary-level diploma is earned.
2. Figures do not include the second or third vocational education diploma that a student may have earned, vocational education diplomas received after a general SSD, or SSDs obtained after a vocational education diploma.

however, the graduation rates for recent years are still lower than in 1995-1996 and have been steadily declining since 1998-1999.

The probability of graduating from secondary school is greater for female students than for male students. The gender gap was nearly 18 percentage points in 1989-1990 and 13 percentage points in 2001-2002.

The graduation rate for female students was above 90% between 1991-1992 and 1995-1996, and has remained a little below this level since 1998-1999. For male students, it passed the 80% mark in 1995-1996, but dropped back to 74.6% in 2001-2002.

Table 5.2

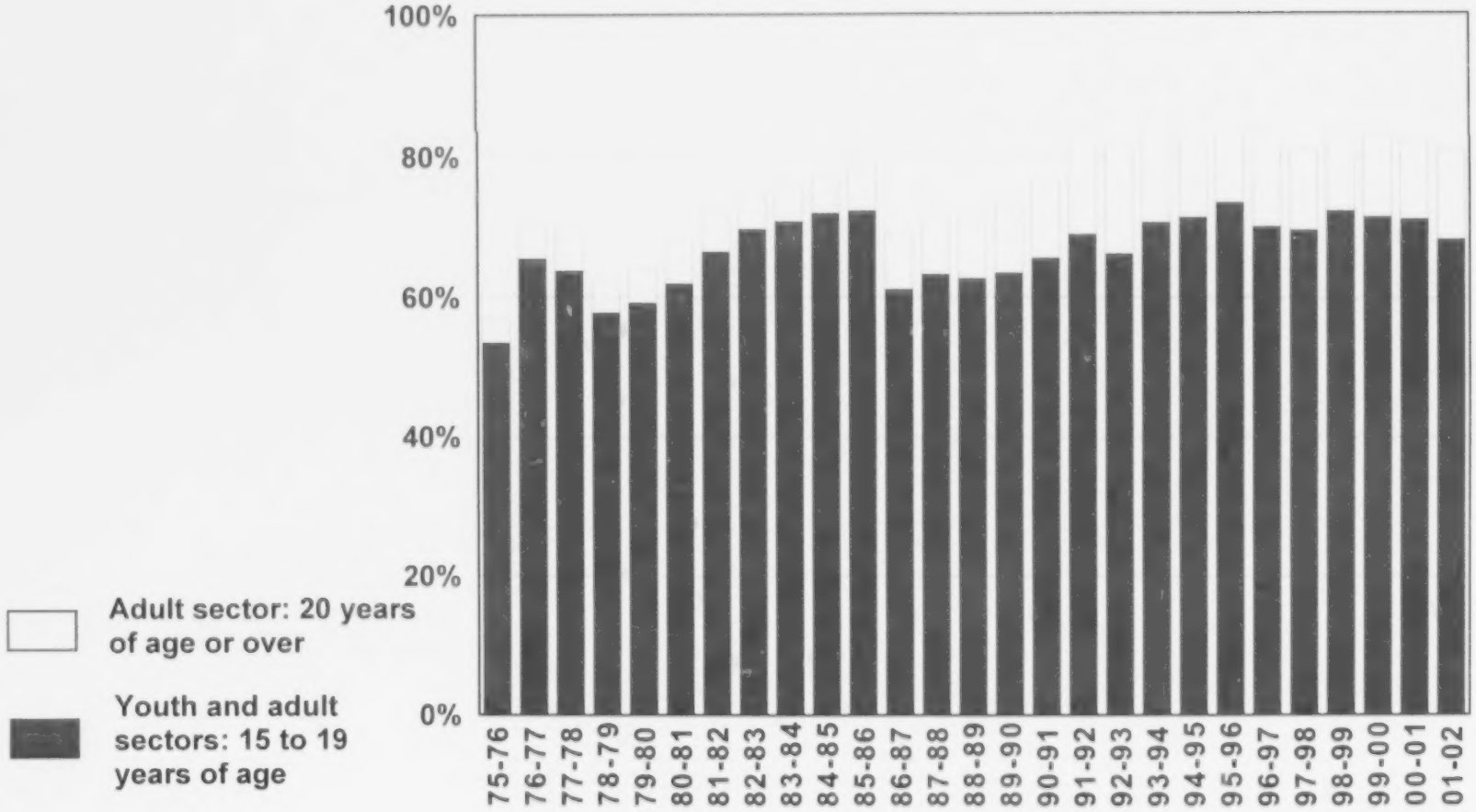
Probability of obtaining a secondary school diploma in either the youth or the adult sector, by gender (%)

	1975-1976	1985-1986	1995-1996	1999-2000	2000-2001	2001-2002[e]
Total	**57.0**	**79.2**	**88.2**	**83.1**	**82.4**	**81.1**
Adult sector: 20 years of age or over	3.5	6.8	14.6	11.6	11.3	12.8
Youth sector or before the age of 20 in the adult sector	53.5	72.3	73.5	71.5	71.1	68.3
Male	**51.2**	**73.1**	**81.5**	**76.6**	**76.1**	**74.6**
Adult sector: 20 years of age or over	3.0	6.0	14.4	12.0	12.0	13.5
Youth sector or before the age of 20 in the adult sector	48.2	67.1	67.1	64.6	64.1	61.2
Female	**63.1**	**85.6**	**95.1**	**89.9**	**89.2**	**87.9**
Adult sector: 20 years of age or over	4.0	7.6	14.8	11.1	10.6	12.0
Youth sector or before the age of 20 in the adult sector	59.1	77.9	80.3	78.8	78.6	75.8

e: Estimates

Graph 5.2

Probability of obtaining a secondary school diploma in either the youth or the adult sector (%)



5.3 Graduation From Secondary School: Regional Disparities–Youth and Adult Sectors

The regional statistics in this section[1] must be interpreted with great caution. For example, the figures vary enough for the ranking of the administrative regions, shown in Graph 5.3, to change considerably from one year to the next. However, an analysis of the statistics for the past few years seems to indicate that the regions of Saguenay–Lac-Saint-Jean, Bas-Saint-Laurent, Chaudière-Appalaches and Capitale-Nationale are those that usually obtain the highest results, while the regions of Outaouais and Nord-du-Québec obtain the lowest results.

In 2001-2002, in 11 of the 17 administrative regions of Québec, the probability of obtaining a first secondary school diploma exceeded 80%. Only one region scored above 90%: Saguenay–Lac-Saint-Jean.

While the probability of obtaining a first secondary school diploma was on the decline in Québec as a whole between 1998-1999 and 2001-2002, the results of some administrative regions improved by several percentage points. For example, the graduation rate in Bas-Saint-Laurent and Abitibi-Témiscamingue increased by more than 2 percentage points from 2000-2001.

Graph 5.3 shows the relative share of the secondary school diplomas in the youth sector and the adult sector with respect to the graduation rate for each administrative region. For example, the probability of obtaining a first secondary school diploma for the province as a whole (81.1%) is broken down as follows: 68.3% for the youth sector and adults under the age of 20, and 12.8% for adults 20 years of age or over. The graduation rate for adults 20 years of age or over varies from one region to another.

1. Refers to the probability of obtaining a first secondary school diploma. The probability of obtaining a first secondary school diploma is determined by grouping the first diplomas obtained at the secondary level in general and vocational education. This indicator is a measure of the proportion of a generation that stays in school until a secondary-level diploma is earned.

Table 5.3

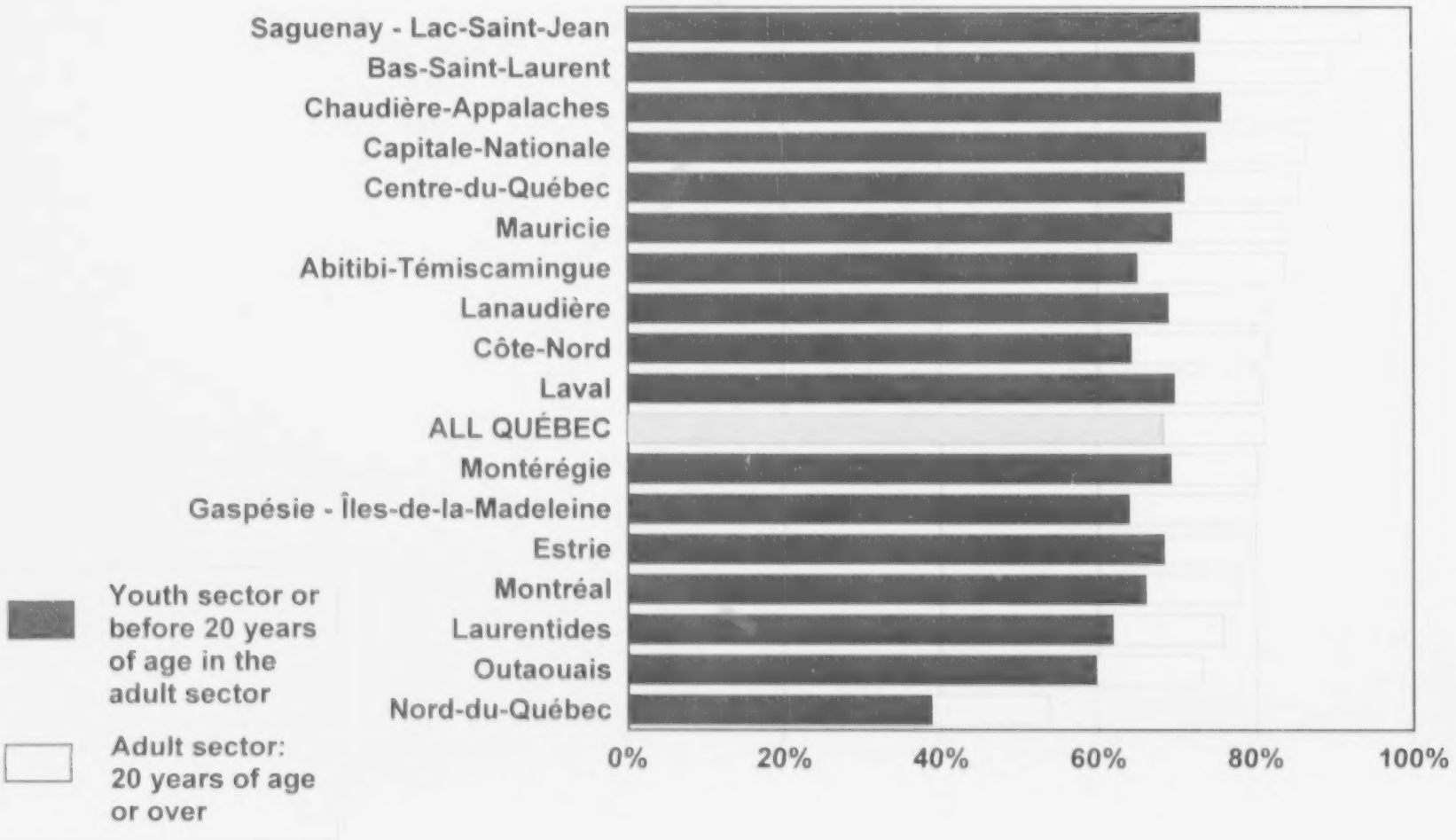
Probability of obtaining a first secondary school diploma, by administrative region (%)

	1991-1992			2001-2002[e]		
	Youth sector or before the age of 20 in the adult sector	Adult sector: 20 years of age or over	Total	Youth sector or before the age of 20 in the adult sector	Adult sector: 20 years of age or over	Total
Gaspésie–Îles-de-la-Madeleine	63.4	22.9	86.3	64.0	15.7	79.7
Bas-Saint-Laurent	70.5	19.1	89.6	72.5	16.8	89.3
Saguenay–Lac-Saint-Jean	72.2	22.5	94.7	73.2	19.9	93.1
Capitale-Nationale	78.1	14.8	92.9	73.9	12.6	86.5
Chaudière-Appalaches	76.8	15.9	92.7	75.8	11.9	87.7
Mauricie	69.7	14.2	83.9	69.5	14.0	83.4
Centre-du-Québec	71.2	15.5	86.7	71.1	14.5	85.6
Estrie	71.4	16.1	87.5	68.4	10.9	79.3
Montérégie	71.4	11.8	83.1	69.3	11.2	80.6
Montréal	66.1	12.3	78.4	66.1	11.9	77.9
Laval	69.3	12.2	81.5	69.7	11.4	81.1
Lanaudière	64.8	12.6	77.4	69.0	12.5	81.4
Laurentides	62.7	14.6	77.3	61.9	13.7	75.6
Outaouais	59.3	18.8	78.2	59.8	13.2	73.0
Abitibi-Témiscamingue	62.6	25.9	88.5	65.1	18.2	83.3
Côte-Nord	60.9	17.9	78.9	64.3	16.9	81.2
Nord-du-Québec	47.6	24.8	72.4	38.8	14.2	53.0
All Québec	**69.0**	**14.6**	**83.6**	**68.3**	**12.8**	**81.1**

e: Estimates

Graph 5.3

Probability of obtaining a first secondary school diploma, by administrative region: 2001-2002 (%)



5.4 Graduation From Secondary Vocational Education–Youth and Adult Sectors

Based on behaviours observed in 2001-2002, 26 out of 100 young Quebeckers can expect to obtain a vocational education diploma[1] in secondary school.[2] This group includes 17 persons who already have a first Secondary School Diploma (SSD) in general education. Since 1997-1998, the proportion of persons obtaining a vocational diploma after earning a diploma in general education has remained relatively stable.

The proportion of a generation of students obtaining a secondary school vocational education diploma was 25.5% in 2001-2002. This is the highest rate ever recorded.

Moreover, the probability of obtaining a first secondary school diploma from the youth sector or before the age of 20 in the adult sector in vocational education was 2.0% in 2001-2002; this rate was higher than 16% in 1977-1978; it has been relatively stable since 1996-1997. Students in the youth sector or before the age of 20 in the adult sector who obtain a first secondary school diploma (68.3% in 2001-2002) are most likely to do so in general education (Section 5.2).

The very nature of vocational education diplomas has also changed. Short vocational programs have been phased out in favour of general education. The basic difference between the Diploma of Vocational Studies (DVS) and its predecessor, the Long Vocational Diploma, is that the DVS deals exclusively with vocational education, since all the components of the vocational programs dealing with general education have been transferred to the SSD.

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1. The diplomas considered here are the Short Vocational Diploma, the Long Vocational Diploma, the Secondary School Vocational Certificate (SSVC), the Diploma of Vocational Studies (DVS–known as the Secondary School Vocational Diploma [SSVD] prior to 1998), the Attestation of Vocational Specialization (AVS), the Attestation of Vocational Education (AVE) and other secondary school diplomas (SSDs) with mention of vocational specialty.
2. Refers to the probability of obtaining a first secondary school diploma. This rate is determined by grouping only the first secondary school diplomas in vocational education. This indicator is a measure of the proportion of a generation that stays in school until a secondary-level diploma is earned in vocational education.

The difference between male and female students is much less pronounced than in general education. Nevertheless, vocational education represents a larger share of the graduation rate for male students (28.2%) than for female students (22.7%).

Table 5.4

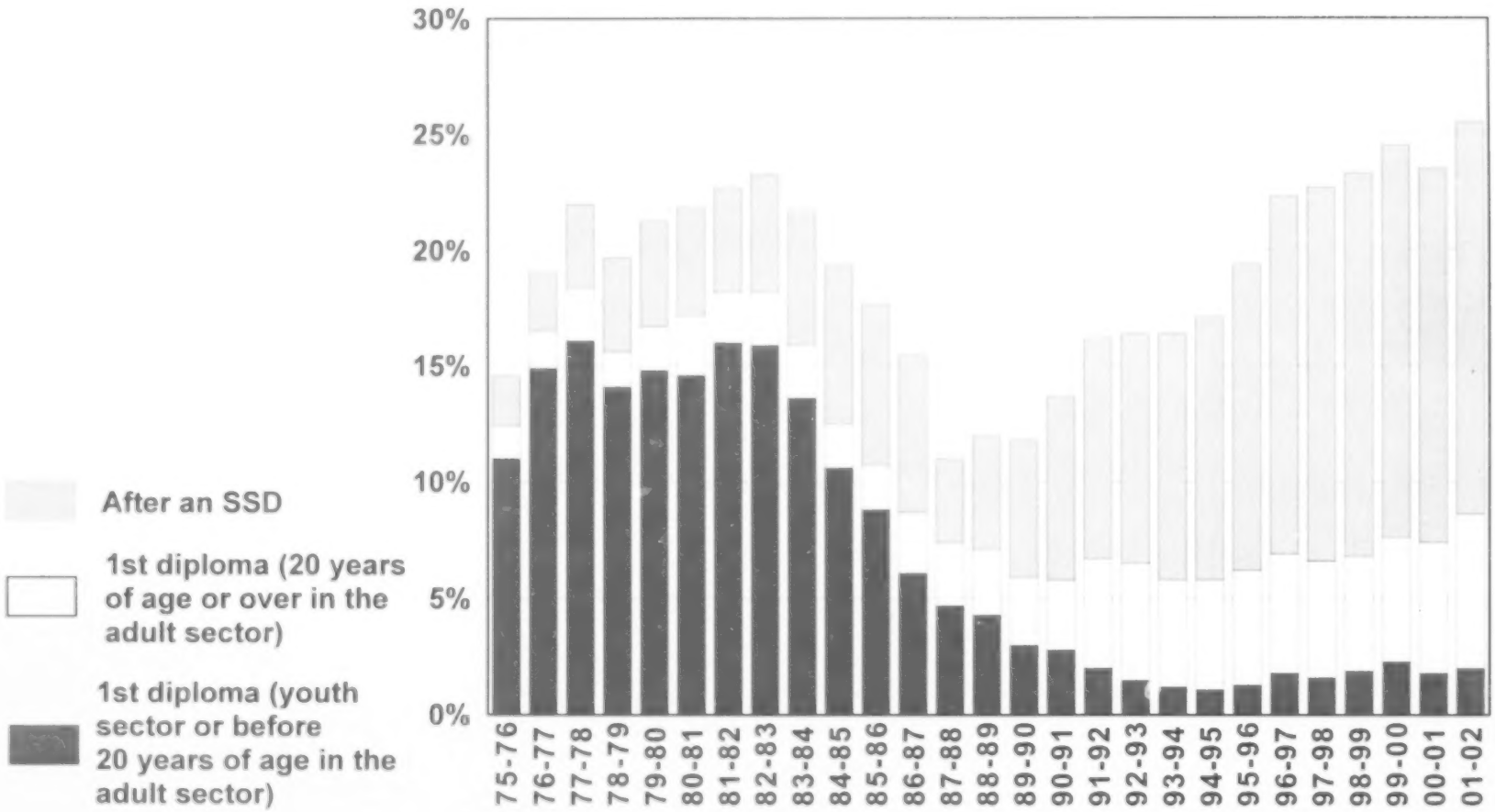
Probability of obtaining a vocational education diploma, by sector, age and gender (%)

	1975-1976	1985-1986	1995-1996	1999-2000	2000-2001	2001-2002[e]
Total	**14.6**	**17.6**	**19.4**	**24.5**	**23.5**	**25.5**
Male	12.0	17.0	21.0	26.4	25.9	28.2
Female	17.2	18.4	17.8	22.5	21.0	22.7
First diploma	12.3	10.7	6.2	7.6	7.4	8.6
After an SSD[1]	2.2	7.0	13.2	16.9	16.1	16.9
Youth sector or before the age of 20 in the adult sector	**13.0**	**15.1**	**4.7**	**7.4**	**6.2**	**6.2**
First diploma	11.0	8.8	1.3	2.3	1.8	2.0
After an SSD[1]	2.1	6.4	3.5	5.1	4.4	4.2
Adult sector: 20 years of age or over	**1.5**	**2.5**	**14.7**	**17.1**	**17.3**	**19.3**
First diploma	1.4	1.9	4.9	5.3	5.6	6.6
After an SSD[1]	0.2	0.6	9.7	11.8	11.7	12.7

e: Estimates
1. SSD: Secondary School Diploma

Graph 5.4

Probability of obtaining a vocational education diploma, by sector and age (%)



5.5 Graduation From Secondary School in Québec and OECD Countries, 2000

In 2002, the Organisation for Economic Co-operation and Development (OECD) published *Education at a Glance*, which contains indicators on graduation from secondary school in OECD countries in 2000.

In 2000, the probability of obtaining a secondary school diploma[1] in Québec was 85%, 8 percentage points higher than the OECD average.

Table 5.5 compares the situation in Québec with that in a number of industrialized OECD nations with respect to the proportion of graduates from public and private secondary schools out of a total population old enough, in theory, to have obtained a secondary school diploma. In 2000, the secondary school graduation rate in Québec (85%) was higher than the average for the OECD countries.

Of the 13 OECD countries appearing in the table,[2] six had higher secondary school graduation rates than Québec. Québec's rate was lower than that of Hungary, Japan, Germany, Poland, the Czech Republic and Finland, but higher than that of France, Sweden, Italy, Ireland, the United States, Iceland and Greece.

Except in Hungary, where the secondary school graduation rate is 3 percentage points higher among male students than among female students, female students are more likely to graduate than male students. The greatest gender differences are observed in Iceland and Greece (16 percentage points), followed by Ireland, Italy and Finland (13 percentage points). Québec, with a difference of 14 percentage points, is among those places where female students are far more likely to graduate than male students. In other countries, graduation rates among male and female students are more comparable, for example, in Japan, France, Germany, Sweden and the United States, where the gap is equal to or less than the OECD average (6 percentage points).

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1. For Québec, this rate was obtained by dividing the number of "first diplomas" awarded in 1999 by the number of 17-year-olds in Québec (the age at which a secondary school diploma is generally awarded in Québec).
2. The countries included in the table are those for which the OECD report provides totals and whose number of students per cohort is significant.

The graduation rate observed for male students in Québec (79%) was 5 percentage points higher than the OECD average for male students. The rate observed for female students in Québec was 92%, 12 percentage points higher than the OECD average for female students.

There are far more students in general education in Québec than there are in vocational education, and this holds true for both male and female students. With a probability of obtaining a diploma in general education of 78%, Québec ranks first among the OECD countries, with a rate 38 percentage points higher than the OECD average.

The reverse is true in vocational education. The probability of obtaining a diploma in vocational education in Québec is 27%, while the average for the OECD countries is 45%. A number of countries obtained very good results in vocational education, including the Czech Republic (79%), Finland (72%) and Hungary (70%).

The probability of obtaining a diploma in vocational education in Québec is very slightly higher for male students than for female students. It is the sector of activity that differs for female and male students.

Table 5.5

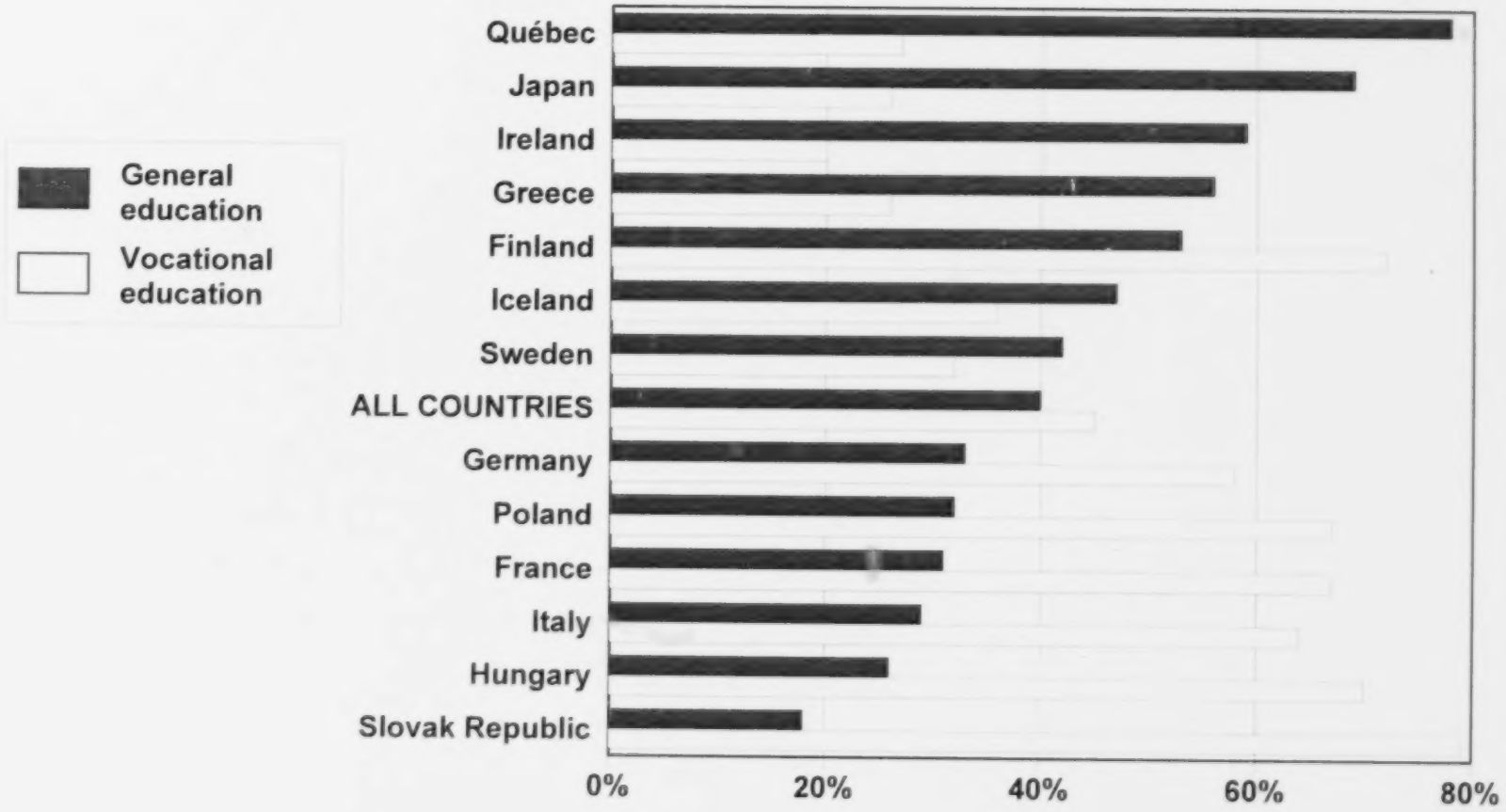
Probability of obtaining a secondary school diploma, by gender and type of program: Québec and OECD countries, 2000 (%)

	Total (without double counting)			General education		Vocational education	
	M + F	Male	Female	M + F	Female	M + F	Female
Hungary	97	98	95	26	32	70	62
Japan	94	92	96	69	73	26	24
Germany	91	89	94	33	36	58	57
Poland	90	87	94	32	41	67	58
Czech Republic	90	90	90	18	21	79	77
Finland	87	81	94	53	64	72	77
Québec	**85**	**79**	**92**	**78**	**87**	**27**	**25**
France	84	81	86	31	37	67	62
Sweden	75	72	78	42	46	32	31
Italy	75	68	81	29	39	64	60
Ireland	74	67	80	59	63	20	23
United States	74	73	74	N/A	N/A	N/A	N/A
Iceland	67	60	76	47	58	36	30
Greece	58	50	66	56	64	26	22
Average	**77**	**74**	**80**	**40**	**45**	**45**	**44**

N/A: Data not available

Graph 5.5

Probability of obtaining a secondary school diploma, general and vocational education: Québec and OECD countries, 2000



5.6 Graduation From College

In 2000-2001, the proportion of a generation who could expect to obtain a first college diploma, be it a Diploma of College Studies (DCS) or any other diploma, was 38.1%. This is an increase of 16.1 percentage points since 1975-1976, when it stood at 22.2%. The proportion of a generation who are admitted to college (see Section 2.8) and the proportion of students who obtain a diploma upon leaving college (see Sections 3.3 and 3.4) are combined to produce this result.

While the proportion of young female Quebeckers who could expect to obtain a DCS had risen by roughly 8.3 percentage points (from 39.2% to 47.5%) since 1985-1986, the proportion of young male Quebeckers who could expect to obtain a DCS dropped slightly and stood at 29.4% in 2000-2001.

The probability of women obtaining a diploma (DCS or other) was approximately one and a half times higher than for men (47.5% compared with 29.4%). The gender gap grew steadily during the 1980s and 1990s. In 1975-1976, the probability of obtaining a college diploma[1] was already 2.7 percentage points higher for women than for men. Since then, the probability has continued to rise more sharply for women, and the gap is now almost 18 percentage points. In fact, in the past 15 years or so, it is virtually only among women that the probability of obtaining a college diploma has grown.

The greatest growth occurred with the pre-university DCS, as the probability of obtaining this type of diploma rose from 13.5% to 23.2% between 1975-1976 and 2000-2001, an increase of 9.7 percentage points, compared with a rise of 7.6 percentage points for the technical DCS over the same period. In the latter case, however, the increase was greater, since the rate doubled. In the past five years, however, only in technical education did the probability of obtaining a diploma increase (1.6 percentage points), while it dropped by 2.4 percentage points for a pre-university DCS.

1. The probability of obtaining a first college diploma measures the proportion of a generation that stays in school until a college diploma is earned.

For both types of programs, the number of women graduating between 1975-1976 and 2000-2001 exceeded the number of men, and the gap between the sexes continued to widen. The probability of women obtaining a pre-university DCS increased by 17.1 percentage points, compared with a rise of 2.6 for men. On the other hand, for both sexes the probability of obtaining a technical DCS grew more modestly (in absolute value), although the increase for men was more pronounced in technical education (7.1 percentage points) than in pre-university education (2.6 percentage points). Women were ahead of men by 4.0 percentage points in 1975-1976, and by 5.1 percentage points in 2000-2001.

The Ministère's objective for the year 2010 is a college graduation rate of 60% for young Quebeckers; in 2000-2001, the rate was 38.3%. The gap between the actual rate and the objective is greater than the increase recorded over the past 25 years, since the probability of obtaining a DCS in 1975-1976 was 21%.

Table 5.6

Probability of obtaining a first college diploma, by gender and type of education (%)

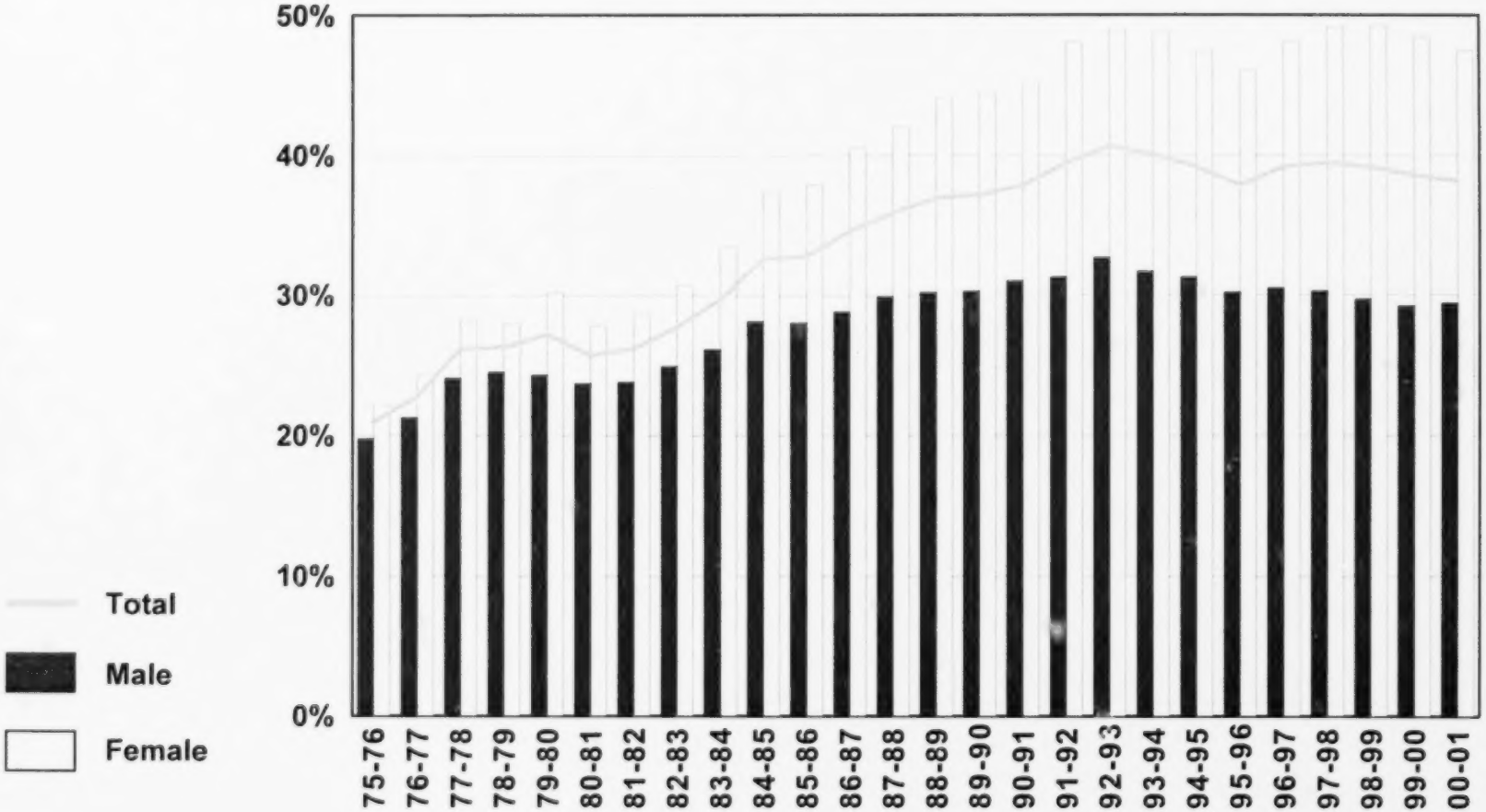
	1975-1976	1985-1986	1995-1996	1998-1999	1999-2000	2000-2001[e]
Male						
All diplomas[1]	20.8	29.7	30.5	29.7	29.2	29.4
DCS[2]	**19.8**	**28.0**	**30.2**	**29.7**	**29.3**	**29.4**
Pre-university education	14.3	18.7	19.2	17.9	17.1	16.9
Technical education	5.5	9.0	10.7	11.8	12.1	12.6
Female						
All diplomas[1]	23.5	39.2	46.4	49.3	48.5	47.5
DCS[2]	**22.2**	**37.9**	**46.1**	**49.3**	**48.5**	**47.5**
Pre-university education	12.7	23.6	29.6	31.4	30.4	29.8
Technical education	9.5	14.0	16.1	17.9	18.0	17.7
Total						
All diplomas[1]	22.2	34.3	38.3	39.2	38.6	38.3
DCS[2]	**21.0**	**32.8**	**37.9**	**39.2**	**38.6**	**38.3**
Pre-university education	13.5	21.1	24.3	24.5	23.6	23.2
Technical education	7.5	11.4	13.4	14.8	15.0	15.1

e: Estimates

1. The diplomas considered here are the Diploma of College Studies (DCS), the Attestation of College Studies (ACS) until 1984, the Certificat d'études collégiales (CEC–certificate of college studies) and the Diplôme de perfectionnement de l'enseignement collégial (DPEC–diploma of advanced college studies). Since 1994, there have been no new enrollments in programs leading to a CEC or to a DPEC.
2. These figures include DCSs without mention of vocational specialty.

Graph 5.6

Probabilty of obtaining a first college diploma, by gender (%)



5.7 Graduation From University[1]

In 2001, the probability of obtaining a bachelor's degree once again declined. It dropped 3.4 percentage points from its peak of 29.0% in 1996, to finally settle at 25.6%.

Based on behaviours observed in 2001, more than one quarter of young Quebeckers (25.6%) can expect to obtain a bachelor's degree. In the past several years, the number of women enrolling in university has grown more rapidly than the number of men (see Section 2.10). The situation for the two sexes has changed drastically since 1976, when the probability of obtaining a bachelor's degree was 13.1% for women and 16.7% for men. In 1983, the probability for both sexes was more similar and, since then, the increase in probability has been in women's favour. In 2001, the probability of obtaining a bachelor's degree was 31.0% for women and 20.5% for men, or an increase of 17.9 percentage points for women and 3.8 percentage points for men.

The Ministère's objective for the year 2010 is a university graduation rate of 30% for young Quebeckers. The current rate (25.6%) shows a slight increase despite a series of drops in university enrollment between 1992-1993 and 1997-1998 (see Section 2.10). The recovery of the enrollment rate in the past five years appears to herald an end to the drop in the probability of obtaining a bachelor's degree. The probability is nevertheless similar in Québec to the average of 25.9% recorded for member countries of the Organisation for Economic Co-operation and Development (OECD) in 2000 (see Section 5.9).

With regard to obtaining a master's degree, the results have continued to increase and reached 7.8% for women and 6.8% for men. For both sexes, the rate of 7.3% represents close to triple the 1976 rate of 2.7%. An increase in enrollment at the master's level (see Section 2.10) points to a continued increase in the number of master's degrees awarded for at least a few years to come. The difference between the sexes here is much less significant (1.0 percentage point) than for the bachelor's degree, but could widen in favour of women, given the growing margin in earning a bachelor's degree. Since 1976, the situation of men and women has reversed; whereas the initial gap was

1. Only university degrees (bachelor's, master's and doctoral degrees) awarded by Québec universities are considered here. Degrees earned by Quebeckers outside the province are not taken into account.

1.6 percentage points in favour of men, the probability of women obtaining a master's degree has climbed from 1.9% to 7.8%, moving ahead of the probability for men in 1993.

Doctorates are still only earned by a minute fraction (1.0%) of the population. This last phase in the education system is perhaps the only one in which men continue to outnumber women. Figures are, however, minimal for both sexes: 1.1% of men obtain a doctorate, compared with 0.9% of women. In view of developments at the master's level, and the trend at the doctoral level (see Section 3.8), the pool of aspiring doctoral candidates is also likely to increase for some time to come.

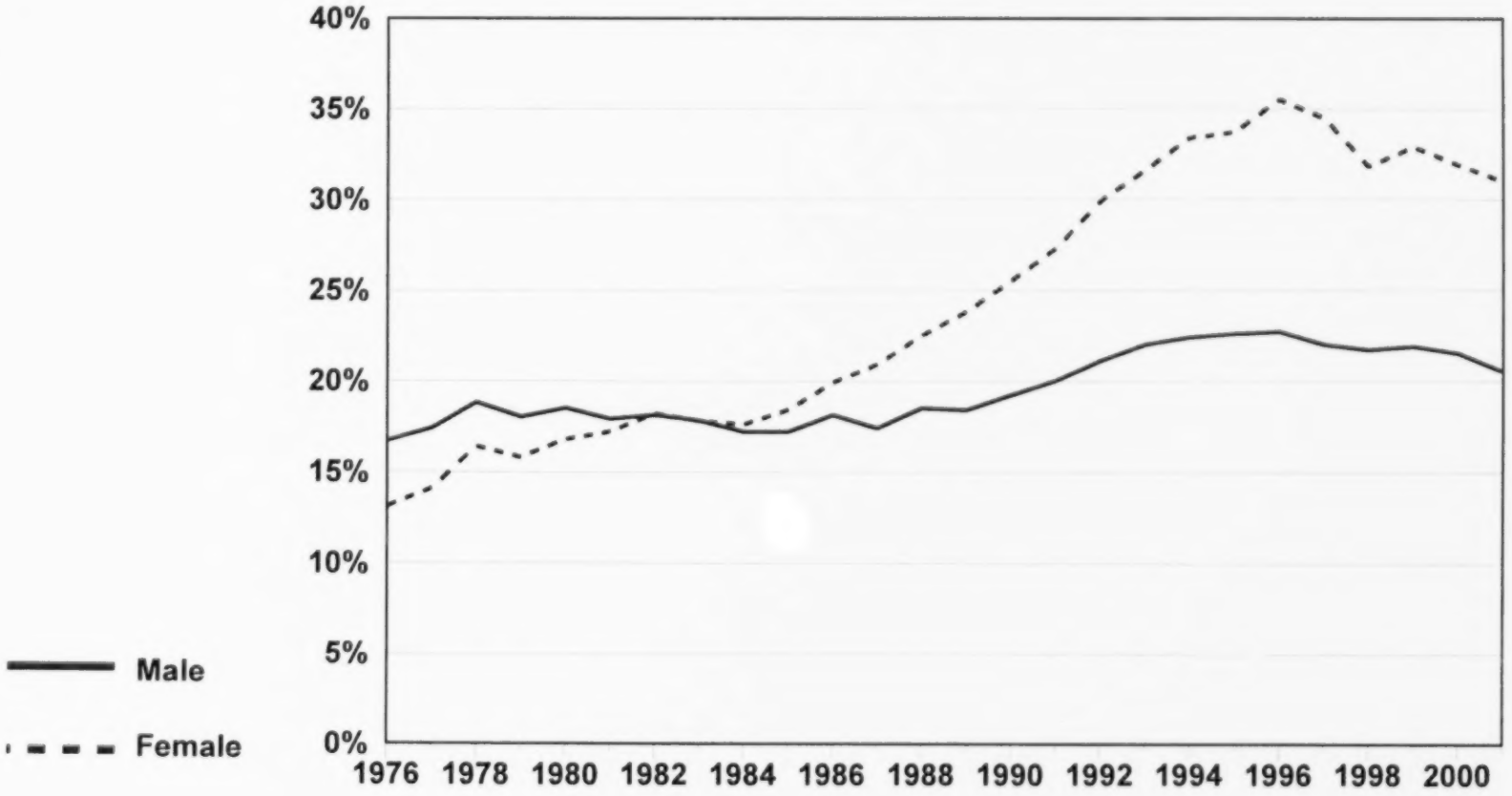
Table 5.7

Probability of obtaining a university degree, by gender (%)

	1976	1986	1991	1996	2000	2001
Bachelor's degree	**14.9**	**19.0**	**23.6**	**29.0**	**26.6**	**25.6**
Male	16.7	18.1	20.0	22.7	21.5	20.5
Female	13.1	19.9	27.3	35.5	31.9	31.0
Master's degree	**2.7**	**3.9**	**4.4**	**6.0**	**7.1**	**7.3**
Male	3.5	4.4	4.4	5.8	6.7	6.8
Female	1.9	3.4	4.3	6.3	7.6	7.8
Doctorate	**0.4**	**0.5**	**0.6**	**0.9**	**1.1**	**1.0**
Male	0.6	0.7	0.9	1.2	1.2	1.1
Female	0.2	0.3	0.4	0.6	0.9	0.9

Graph 5.7

Probability of obtaining a bachelor's degree, by gender (%)



5.8 University Degrees by Field of Study[1]

In 2001, the largest proportion (26.8%) of bachelor's, master's and doctoral degrees issued by Québec universities were earned in the humanities, followed by business administration (22.2%), education (10.8%), engineering and architecture (10.7%), health sciences (8.4%) and natural sciences (8%). Social sciences represented 4.8%, mathematics and computer science, 5%, and law, 3.3% of the degrees earned.

In 2001, the proportion of degrees earned in engineering and architecture, as well as mathematics and computer science, accounted for 15.7% of all the bachelor's, master's and doctoral degrees awarded. In these fields of study, more men (75.1%) obtained degrees. However, more women earned degrees in the other fields of study (except business administration), as well as in all fields combined.

The majority of degree holders are women (57.2%). In 2001, women earned 79.4% of the degrees in education, 79.1% in social sciences, 74.8% in health sciences, 66.6% in the humanities, 56.8% in law and 54.0% in natural sciences. Men earned 77.5%[2] of the degrees in engineering and architecture, 70.1% in mathematics and computer science, and 52.2% in business administration.

Compared with 1990, the number of degrees issued by universities in 2001 rose by 17%. This percentage is the result of a 25.4% increase in the number of degrees awarded to women and a 7.4% increase for men.

In the past 12 years, the distribution of the degrees awarded according to field of study has changed. Between 1990 and 2001, for example, the number of degrees in business administration dropped (by 0.4 percentage points) as did the number of degrees in engineering and architecture (also by 0.4 percentage points), and in health sciences and education (by 0.3 percentage points).

At the other extreme, the number of degrees awarded in mathematics and computer science rose by 1.0 percentage point, the humanities, by 0.5 percentage points, and natural sciences, by 0.2 percentage points.

---

1. This refers to students who earned a university degree (bachelor's, master's or doctoral degree) during the year in question.
2. The proportion of degrees in engineering and architecture earned by women rose from 16.8% in 1990 to 22.5% in 2001.

For member countries of the Organisation for Economic Co-operation and Development (OECD),[3] degrees earned in the sciences (life sciences, physical sciences and agriculture, mathematics and computer science, engineering, and manufacturing and construction activities) accounted for 26% of the total number of degrees earned in 2000; in Québec (natural sciences, mathematics and computer science, engineering and architecture), this proportion was 23.7% in 2001. The proportion of degrees in social sciences, law and business administration was 33.8% for the OECD countries in 2000 and 30.3% for Québec in 2001, whereas the proportion of degrees in health sciences was 11.6% for the OECD countries in 2000 and 8.4% for Québec in 2001. Degrees in the humanities, literature and education represented 28.6% for the OECD countries and 37.6% for Québec.

3. Source: OECD, *Education at a Glance–OECD Indicators* (Paris: 2002). Any comparison between the results presented in this section and those published by the OECD must take into account the different methodologies used to obtain the results.

Table 5.8

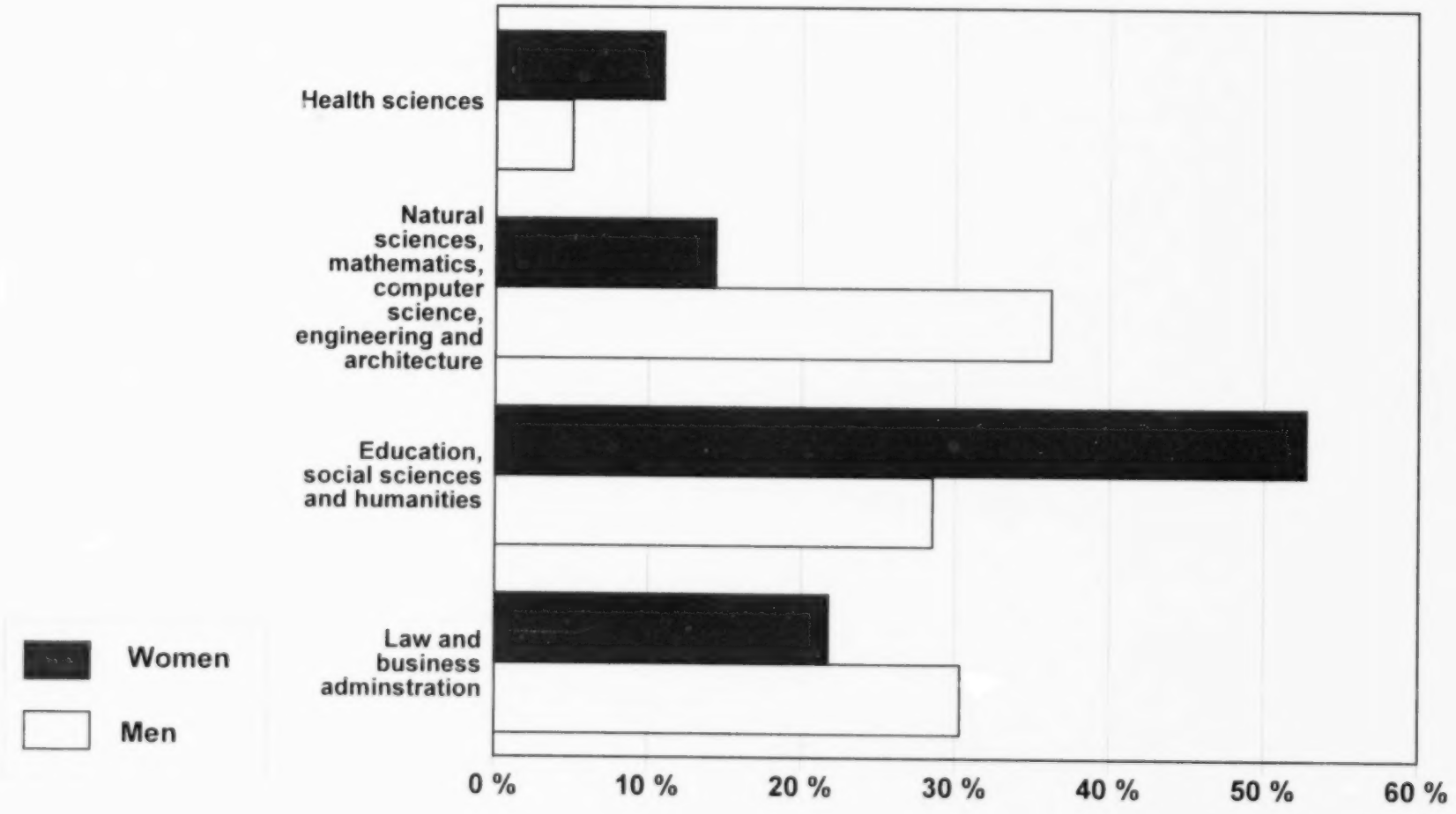
Distribution of university degrees, by field of study and gender[1] (%)

	1990	1995	1997	1998	1999	2000	2001
Health sciences	8.7	8.9	9.7	9.2	9.6	8.6	8.4
Natural sciences	7.8	6.5	7.6	8.0	8.0	8.6	8.0
Mathematics and computer science	4.0	3.6	3.8	3.8	4.0	4.7	5.0
Engineering and architecture	11.1	11.0	10.1	10.2	10.2	10.2	10.7
Law	3.5	3.2	3.3	3.4	3.1	3.4	3.3
Business administration	22.6	20.0	19.0	20.5	20.1	21.1	22.2
Education	11.1	15.1	13.3	10.4	12.4	11.2	10.8
Humanities	26.3	27.3	28.1	29.1	27.5	27.1	26.8
Social sciences	4.9	4.4	5.1	5.4	5.1	5.1	4.8
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Female	53.4	56.4	57.6	56.6	57.0	56.7	57.2
Male	46.6	43.6	42.4	43.4	43.0	43.3	42.8

1. Only holders of bachelor's, master's or doctoral degrees who obtained their degree in the year in question are considered.

Graph 5.8

Distribution of university degrees, by field of study and gender: 2001 (%)



5.9 Graduation From University in Québec and OECD Countries, 2000

In 2002, the Organisation for Economic Co-operation and Development (OECD) published *Education at a Glance*, which contains indicators on graduation from university in OECD countries in 2000.

In 2000, the probability of obtaining a bachelor's degree in Québec was 26.6%, and the average observed for the OECD countries was 25.9%.

Table 5.9 compares the situation in Québec with that in a number of industrialized OECD nations with respect to graduation from university. In 2002, the probability of obtaining a bachelor's degree was 26.6% in Québec, that is, 0.7 percentage points higher than the OECD average. In 1999, the gap was 5.0 percentage points.

In 2000, nine of the 16 OECD countries appearing in Table 5.9 (excluding Canada) had a higher probability of obtaining a first undergraduate (bachelor's) degree than Québec, that is, the United Kingdom (37.5%), Finland and Australia (36.3%), Poland (34.4%), Iceland (33.2%), the United States (33.2%), Ireland (31.2%), Japan (30.9%) and Sweden (28.1%). The rates in Canada and Québec were essentially the same (27.9% and 26.6%). However, the gap between the probability of obtaining a bachelor's degree in Canada and Québec has narrowed since 1999, dropping from 2.0 to 1.3 percentage points.

The probability of obtaining a doctorate in Québec was 1.1%, slightly higher than the OECD average (1.0%) and the rate in Canada (0.8%). Switzerland (2.6%), Sweden (2.5%) and Germany (2.0%) posted the highest university graduation rates from postgraduate research programs.

Table 5.9

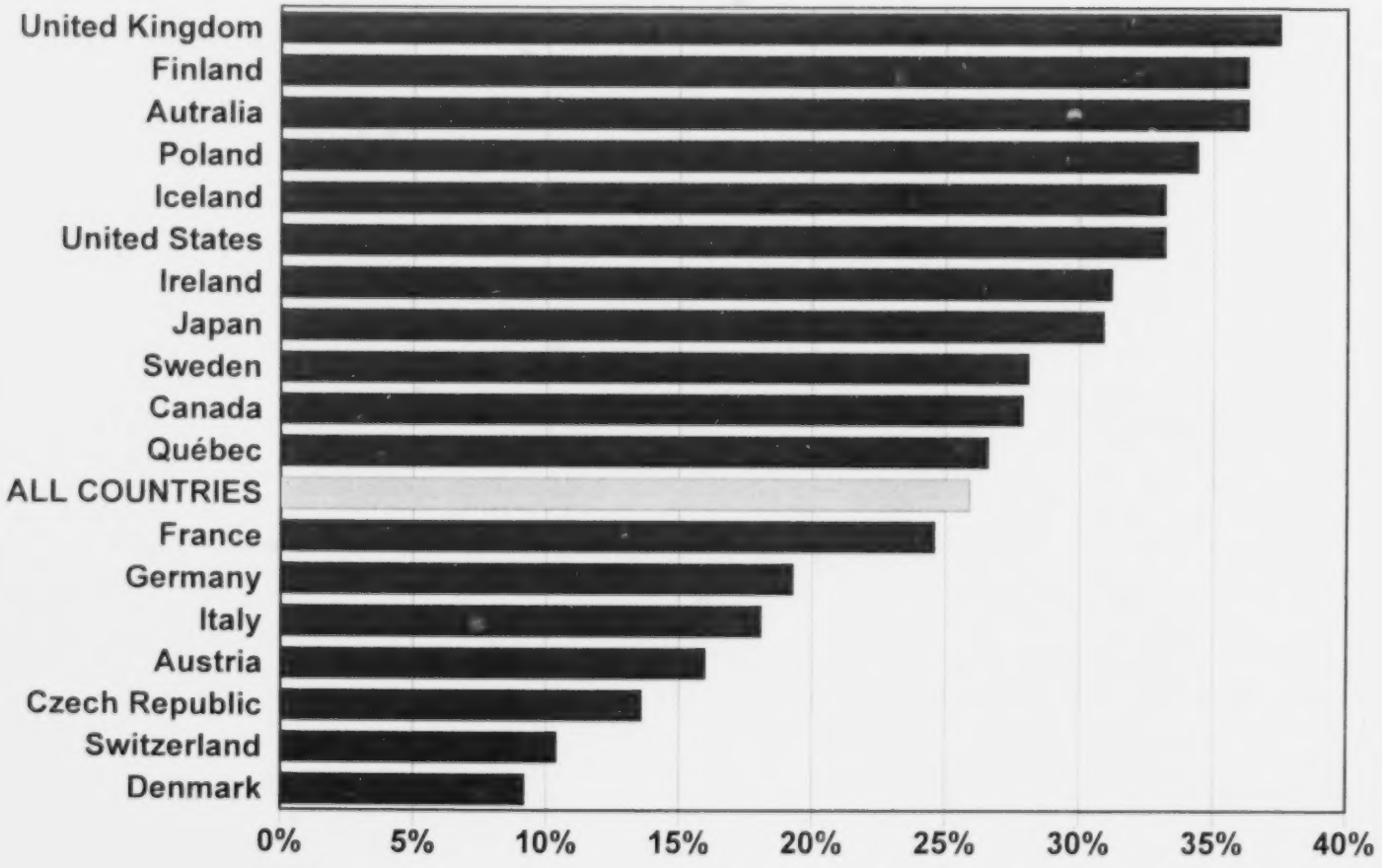
Probability of obtaining a university degree (bachelor's degree and doctorate) in Québec and certain OECD countries, 2000 (%)

	Bachelor's degree	Doctorate
United Kingdom	37.5	1.3
Finland	36.3	1.9
Australia	36.3	1.3
Poland	34.4	N/A
Iceland	33.2	i
United States	33.2	1.3
Ireland	31.2	0.8
Japan	30.9	0.7
Sweden	28.1	2.5
Canada	**27.9**	**0.8**
Québec	**26.6**	**1.1**
France	24.6	1.2
Germany	19.3	2.0
Italy	18.1	0.4
Austria	16.0	1.4
Czech Republic	13.6	0.6
Switzerland	10.4	2.6
Denmark	9.2	1.1
Average	**25.9**	**1.0**

N/A: Data not available
i: Insignificant number

Graph 5.9

Probability of obtaining a bachelor's degree in Québec and certain OECD countries, 2000 (%)



6.1 Employment Trends by Level of Education

The increase of 118 000 jobs in 2002 over 2000 has benefited all workers, but especially individuals who have a postsecondary diploma or a university degree.

Since the early 1990s, the structure of the labour market in Québec and in Canada as a whole has been changing in a way that benefits workers with more education. Indeed, the employment situation has been more favourable for those with a postsecondary diploma or university degree,[1] both during the recession of the early 1990s and in the period since 1993, when employment has been on the rise. The data presented in this section is from Statistics Canada. The levels of education considered here correspond to the highest level of education attained by employed workers in a given year.[2] It should be noted, however, that these levels do not necessarily correspond to employment requirements.

In Québec, it was not until 1995 that the job losses suffered in the last recession were absorbed. In 2002, although there were 451 000 more jobs than in 1990, this growth in employment did not benefit all workers. Those with only a secondary school diploma or who did not finish secondary school suffered job losses, while those who successfully completed some postsecondary studies or graduated from college or university made gains. Thus, employed individuals with a university education were more numerous (by 277 000) in 2002 than in 1990, for an increase of 66.6%. Those with a postsecondary diploma held 460 000 more jobs (50.5%) in 2002 than in 1990. Those with only some postsecondary studies were more likely to hold jobs in 2002 than in 1990 (33 000 more), for an increase of 13%. In short, those with a postsecondary or university education held 770 000 more jobs in 2002 than in 1990.

The situation was different for those with only a secondary education, whether or not they obtained a diploma. In all, these individuals held 319 000 fewer jobs in 2002 than in 1990. Fewer people who left school after obtaining a secondary school diploma held jobs in 2002 than in 1990 (25 000 fewer), representing a decrease of 4% over 1990.

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1. According to Statistics Canada terminology, elementary school includes the first two years of secondary education. Postsecondary studies include all programs leading to diplomas and certificates in the trades (including the Diploma of Vocational Studies) and exclude university studies. The university sector begins with programs leading to at least a bachelor's degree.
2. The level of education attained by a person may increase over time. It is therefore possible that the same job, held by the same person, will be considered to be held by a person with a higher level of education in a given year than in an earlier year.

The number of individuals who were employed and whose highest level of education fell short of a secondary school diploma declined in 2002 by 294 000 compared with 1990, for a decrease of 31.7%.

Table 6.1

Employment trends in Québec, by level of education[1] (in thousands)

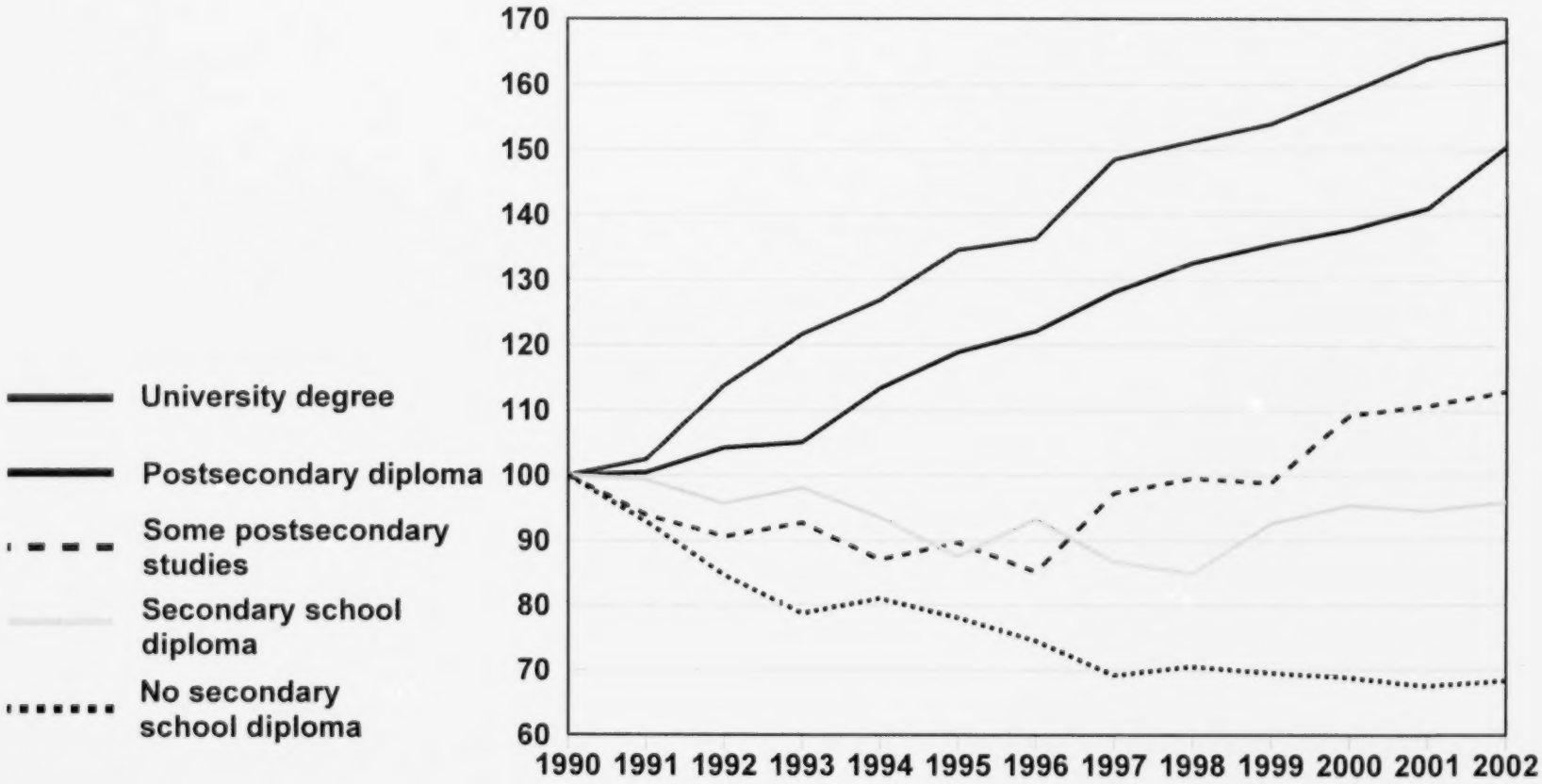
Year	No secondary school diploma	Secondary school diploma	Some postsecondary studies	Postsecondary diploma	University degree	Total
1990	927	632	257	910	416	3 141
1992	784	604	233	948	473	3 042
1995	723	553	230	1 082	560	3 148
2000	638	604	281	1 254	661	3 438
2001	626	598	285	1 284	682	3 475
2002	633	607	290	1 370	693	3 593
Change from 1990 to 2001	- 31.7%	- 4.0%	13.0%	50.5%	66.6%	14.3%

Source: Statistics Canada

1. See notes 1 and 2 at the bottom of the text.

Graph 6.1

Employment trends in Québec, by level of education (1990 = 100)



6.2 Labour Force Attachment by Level of Education[1]

In 2002, more than half of all jobs in Québec were held by people with a postsecondary diploma or university degree.

In 2002, approximately one out of every six jobs in Québec (17.6%) was held by a person who had not finished secondary school. Approximately one out of every four jobs (25%) was held by a person having finished secondary school or begun postsecondary studies. More than half of all jobs (57.4%) were held by people with a postsecondary diploma or university degree.

Of the 19.3% who had a university degree, 14% had a bachelor's degree and 5.3% had a higher degree.

The proportion of jobs in Québec held by individuals who did not finish secondary school was 2.9 percentage points higher than in Ontario and 2.2 percentage points higher than in the other provinces; the proportion of jobs held by individuals with a secondary school diploma or who had begun postsecondary studies was lower by 6.3 and 7.6 percentage points, respectively; and the proportion of jobs held by individuals with a postsecondary diploma or university degree was higher by 3.4 and 5.5 percentage points, respectively.

The proportion of jobs in Québec held by postsecondary graduates was 6.9 percentage points higher than in Ontario and 4.6 percentage points higher than in the other provinces, while the proportion of jobs held by university graduates was 3.5 percentage points lower than in Ontario, but 0.8 percentage points higher than in the other provinces.

Of the university graduates, the proportion of those with bachelor's degrees was lower than in Ontario (by 1.1 percentage points), but 1.2 percentage points higher than in the other provinces, while the proportion of people with higher degrees was 2.4 percentage points lower than in Ontario and 0.7 percentage points lower than in the other provinces.

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1. According to Statistics Canada terminology, postsecondary studies include all programs leading to diplomas and certificates in the trades (including the Diploma of Vocational Studies) and exclude university studies. The university sector begins with programs leading to at least a bachelor's degree.

The gaps between the proportion of jobs held by graduates of various levels in Québec with respect to Ontario and the other provinces in 2002 are smaller than those that existed 12 years earlier, in 1990. The gap between the proportion of jobs held by individuals without a secondary school diploma in Québec with respect to Ontario increased by a mere 0.1 percentage points, while with respect to the other provinces it decreased by 2.2 percentage points. Secondly, the gaps between the proportion of postsecondary and university graduates increased by 1.3 percentage points with respect to Ontario and by 3.6 percentage points in relation to the other provinces. The gap between the proportion of jobs held by secondary school graduates increased with respect to Ontario and the other provinces (by 1.4 and 1.3 percentage points, respectively).

Table 6.2

Employment by highest level of education: Québec, Ontario and the other provinces, 1990 and 2002[1] (%)

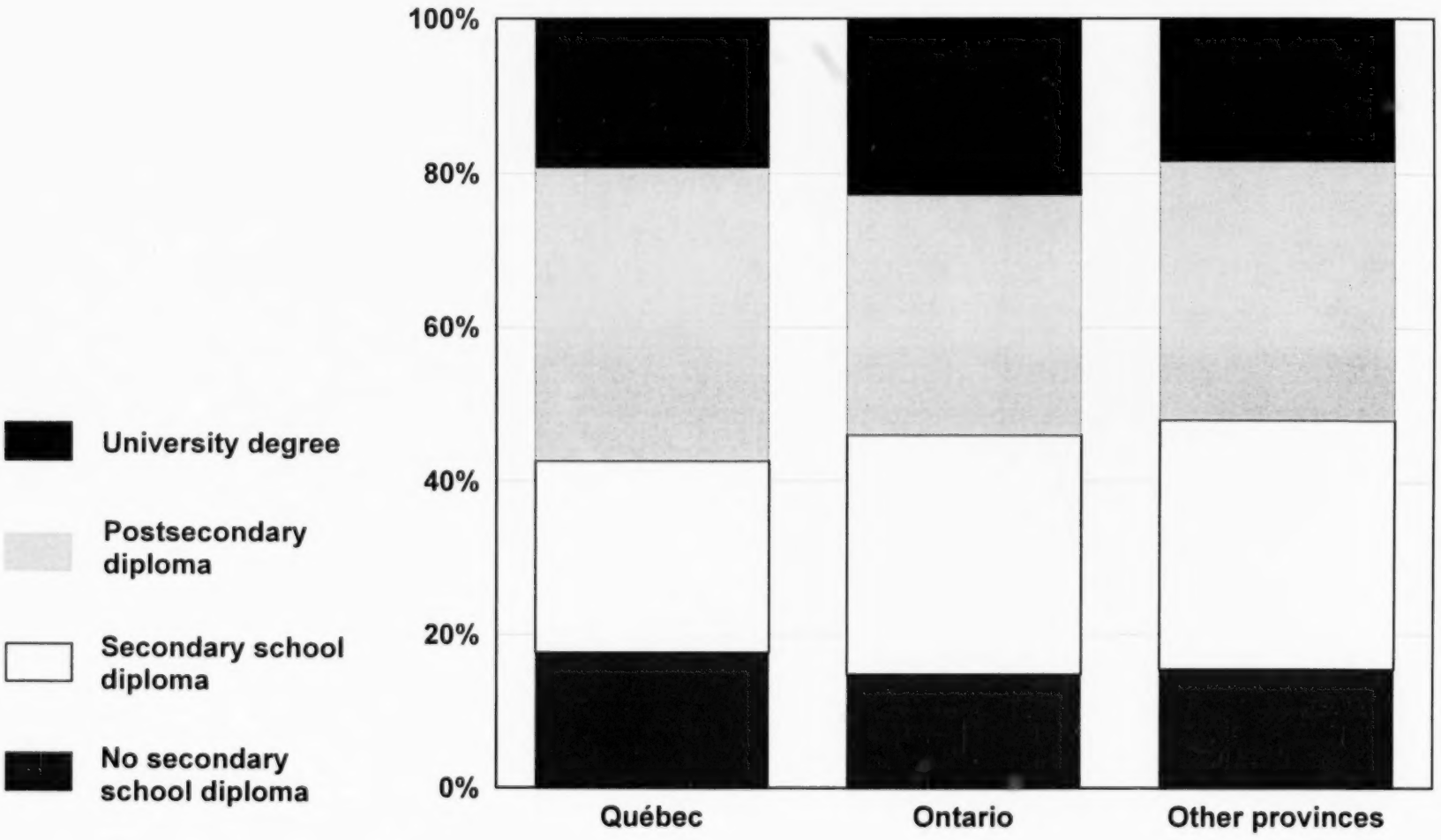
	Québec		Ontario		Other provinces	
	1990	2002	1990	2002	1990	2002
Total	100.0	100.0	100.0	100.0	100.0	100.0
No secondary school diploma	29.5	17.6	26.7	14.7	25.1	15.4
Secondary school diploma	20.1	16.9	23.0	22.2	24.3	22.1
Some postsecondary studies	8.2	8.1	10.2	9.1	10.3	10.5
Postsecondary diploma	29.0	38.1	24.0	31.2	27.0	33.5
University degree	13.2	19.3	16.1	22.8	13.3	18.5
Bachelor's degree	9.1	14.0	10.7	15.1	9.3	12.8
Higher degree	4.1	5.3	5.4	7.7	4.0	5.7

Source: Statistics Canada

1. See note 1 at the bottom of the text.

Graph 6.2

Distribution of employment, by highest diploma earned: 2002 (%)



6.3 Labour Market Integration of Graduates

From one year to the next, a large portion of the approximately 200 000 secondary school, college and university graduates enter the labour market. The data obtained through Québec government *Relance* studies provides a picture of the placement of some 90 000 secondary school vocational education, college technical education and university graduates a number of months after they obtain their diploma or degree.[1]

The unemployment rates among graduates of vocational and technical education in 2002 were comparable to those observed in the labour force as a whole. Employers were more likely to hire graduates entering the labour market than in previous years.

Since 1998, more than 84.6% of students with a Diploma of Vocational Studies (DVS) (known as the Secondary School Vocational Diploma [SSVD] prior to 1998) have found work. On March 31, 2002, 86.6% of students who graduated with a DVS were in the labour force (either working or looking for work), a higher rate than those observed in 2000 and 2001. The unemployment rate for those with a DVS has been in decline since 1996, dropping from 27.0% in 1996 to 12.0% in 2002.

The situation of students with an Attestation of Vocational Specialization (AVS) between 1998 and 2002 was different from that of graduates with a DVS. The proportion of students with an AVS who are in the labour force has fallen consistently since 1998, when it stood at 89.1%, to settle at 85.1% in 2002. On the other hand, the proportion of students with an AVS who are still in school is increasing, growing from 5.8% in 1998 to 9.2% in 2002. The unemployment rate among students with an AVS has been falling since 2000, from 12.4% to 10.2% in 2002.

In 2002, 74.8% of students who graduated from a college technical program with a Diploma of College Studies (DCS) were in the labour force, a decrease with respect to the figures observed since 1998. The unemployment rate for these individuals was slightly higher in 2002, having increased from 5.4% in 2001 to 6.0% in 2002.

---

1. Results refer to students graduating in the year indicated, approximately nine months after the completion of studies for graduates with a DVS or an AVS and roughly 10 months for graduates with a DCS (15 months for those finishing in the fall). The situation for those graduating with a bachelor's, master's or doctoral degree is as of January, approximately 20 months after they obtained their degree.

Between 1998 and 2001, 13.4% to 16.5% of students who graduated from a college pre-university program have been in the labour force.[2] In 2001, 78.6% of them went on to university without interrupting their studies. The unemployment rate for graduates from a pre-university program has been falling since 1999 and stood at 77.4% in 2002.[3]

Since 1992, more than 77.6% of students with a bachelor's degree have entered the labour force. In 2001, 77.6% of them did so, compared with 80.8% in 1999. The unemployment rate has fallen considerably since 1994, going from 11.4% to 4.0% in 2001.

In 2001, 82.3%, of students with a master's degree entered the labour force, a drop from the 86.1% observed in 1999. The unemployment rate, which had risen from 6.8% to 8.1% between 1994 and 1997, was 7.4% in 1999. The unemployment rate in 2001 fell by half, compared with the 1999 rate.

In 2001, 91.5% of graduates with doctorates entered the labour force. Their unemployment rate in January 2001 was 6.2%, a slightly higher rate than that observed for graduates with bachelor's (4.0%) or master's (3.7%) degrees.

Overall, a comparison of the unemployment rates of secondary school vocational education, college technical education and university graduates with those observed for the labour force as a whole in Québec in the late 1990s indicates that the situation of recent graduates has improved, except for those from college pre-university education (see Table 6.3 and Graph 6.3).

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2. Data for 2002 is unavailable, since the relevant *Relance* survey was not published that year.
3. See Section 2.9 on the proportion of college graduates going on to university without interrupting their studies.

Table 6.3

Unemployment rates for graduates, by level of education and type of diploma or degree (%)

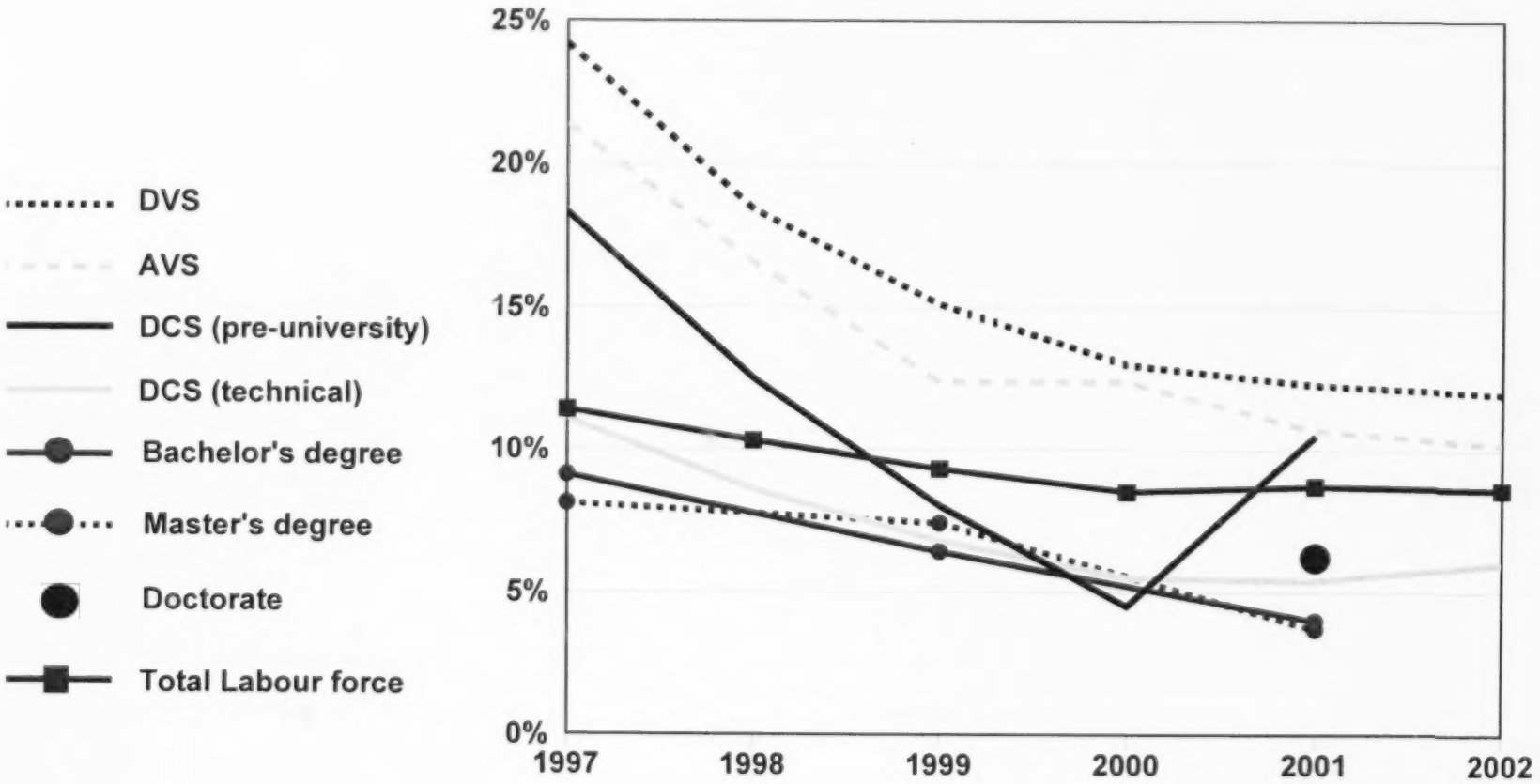
	1998	1999	2000	2001	2002
Secondary education					
DVS	18.4	15.1	13.0	12.3	12.0
AVS	16.6	12.4	12.4	10.7	10.2
College					
Pre-university education	12.5	8.1	4.5	10.5	N/A
Technical education	8.6	6.8	5.5	5.4	6.0
University					
Bachelor's degree	N/A	6.4	N/A	4.0	N/A
Master's degree	N/A	7.4	N/A	3.7	N/A
Doctorate	N/A	N/A	N/A	6.2	N/A
Unemployment rate in Québec[1]					
15-19-year-olds	23.7	21.3	18.5	18.6	19.0
20-24-year-olds	14.2	12.7	11.6	10.8	10.4
25-34-year-olds	9.7	8.7	8.1	7.8	7.5
Total labour force	10.3	9.3	8.5	8.7	8.6

1. Data obtained from Statistics Canada. Includes the total labour force, regardless of level of education and work experience. For 2001 and 2002, the unemployment rates are calculated on the basis of an average for all 12 months; for the other years, the average for the first 11 months is used.

N/A: Data not available

Graph 6.3

Unemployment rates for graduates, by level of education and type of diploma or degree (%)



6.4 Labour Market Integration of Secondary Vocational Education Graduates

On March 31, 2002, about nine months after graduation, 76.2% of graduates of programs leading to a Diploma of Vocational Studies (DVS) were employed, as were 76.4% of graduates of programs leading to an Attestation of Vocational Specialization (AVS). The employment rate among graduates of programs leading to a DVS increased, while that among graduates of programs leading to an AVS decreased slightly with respect to 2001.

The unemployment rates for graduates with a DVS or AVS have decreased since 1998: they were 12.0% and 10.2%, respectively, in 2002. The unemployment rates for 2002 are similar to those for the Québec labour force.

A decline of 2.7% in the number of new graduates with a DVS was observed in 2002. The number of graduates in the *Relance* survey for secondary vocational education went from 25 792 in 2001 to 25 092 in 2002. Proportionally speaking, however, the number of jobs held by these graduates declined only by 0.2%, from 19 175 in 2001 to 19 132 in 2002.

On March 31, 2002, 76.2% of graduates of programs leading to a DVS were employed, 10.4% were looking for a job, 9.4% were studying and 3.9% were inactive. The proportion of individuals with a DVS who were in the labour force (employed or looking for work) was 86.6%, higher than in 2000. The unemployment rate for DVS graduates has been in decline since 1996, decreasing by more than half from 27.0% in 1996 to 12.0% in 2002.

A total of 86.8% of DVS graduates were employed full-time in 2002. This percentage is slightly lower than in 2001, when it stood at 87.7%. There is an obvious trend throughout: more men than women are employed full-time. Between 1998 and 2002, the percentage of men employed full-time rose from 91.8% to 94.8%, compared with an increase of from 72.9% to 76.5% for women.

Between 1998 and 2002, the correspondence between the field of study and the field of employment increased from 68.0% to 77.9% among DVS graduates working full-time. However, for the past three years, this trend has been more favourable for women than men. The proportion of individuals working in a field related to the diploma earned rose from 72.9% in 2000 to 76.9% in 2002 among women, while, among men, it remained relatively stable, rising from 78.0% to 78.7% during the same period.

According to the *Relance* survey, the number of new AVS graduates dropped by 3.2% to 3 182 in 2002 from 3 287 in 2001. The number of jobs held by AVS graduates declined by 4.2%, from 2 537 in 2001 to 2 431 in 2002.

On March 31, 2002, 76.4% of the class of 2000-2001 who graduated from programs leading to an AVS were employed, 8.7% were looking for a job, 9.2% were studying, and 5.7% were inactive. The number of AVS graduates in the labour force fell from 86.5% in 2001 to 85.1% in 2002. After dropping between 1996 and 1999, the unemployment rate for AVS graduates remained steady in 2000 at 12.4%. It dropped to 10.7% in 2001, then to 10.2% in 2002.

A total of 85.5% of AVS graduates were employed full-time in 2002, compared with 84.8% in 2001. While the situation of women improved in 2001, there is still a large gap between the full-time employment rate of women (76.7%) and that of men (94.0%). The correspondence between the field of study and the field of employment among students with an AVS also increased slightly, from 74.5% in 2001 to 75.8% in 2002. This trend was more pronounced with respect to women than men between 2001 and 2002.

The proportion of graduates with a DVS or AVS under the age of 20 who were employed in 2002 was 74.9%, while 7.6% were looking for work, 15.1% were studying, and 2.3% were inactive. Among this age group, the proportion of graduates with a DVS or AVS in the labour force was 82.5% in 2002, while the corresponding proportion observed in 2001 was 80.5%. The unemployment rate for this age group was still lower than that of DVS and AVS graduates taken as a whole: it has been declining since 1996 and stood at 9.2% in 2002.

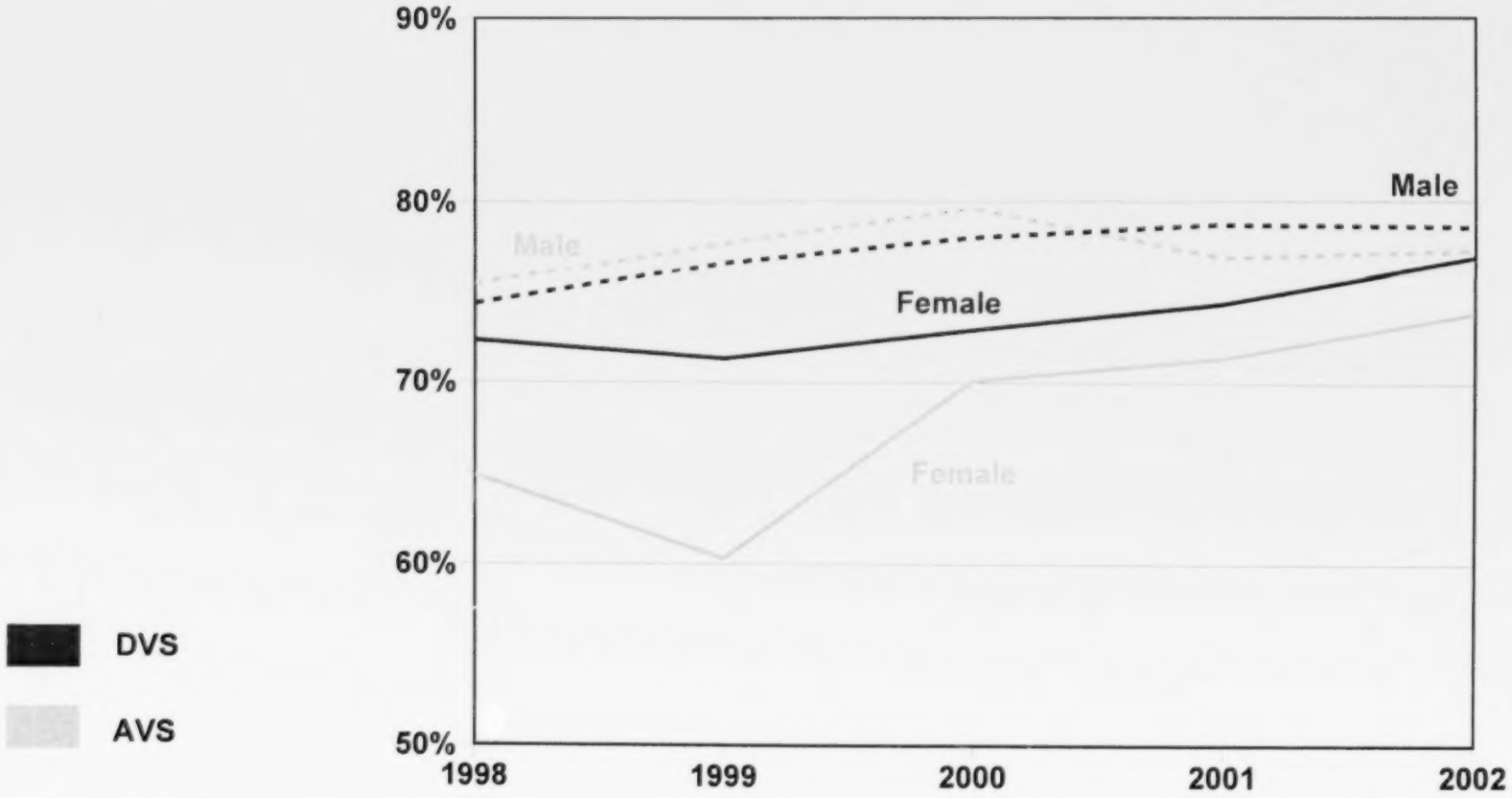
Table 6.4

Employment situation of secondary school vocational education graduates, by graduation class, as at March 31 of the year following their graduation (%)

	1998	1999	2000	2001	2002
Graduates with a DVS (formerly SSVD)					
Employed	73.2	74.5	73.6	74.3	76.2
Seeking employment	16.5	13.3	11.0	10.4	10.4
Studying	6.0	8.3	11.1	11.1	9.4
Inactive	4.3	3.9	4.3	4.2	3.9
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Unemployment rate	18.4	15.1	13.0	12.3	12.0
Graduates with an AVS					
Employed	74.3	77.3	76.1	77.2	76.4
Seeking employment	14.8	10.9	10.8	9.3	8.7
Studying	5.8	6.8	8.0	7.5	9.2
Inactive	5.1	5.0	5.1	6.1	5.7
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Unemployment rate	16.6	12.4	12.4	10.7	10.2
Graduates with a DVS or AVS under the age of 20					
Employed	75.8	76.1	72.2	73.0	74.9
Seeking employment	12.9	10.2	8.6	7.5	7.6
Studying	8.3	11.3	16.3	17.2	15.1
Inactive	3.0	2.5	2.9	2.4	2.3
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Unemployment rate	14.5	11.8	10.7	9.3	9.2

Graph 6.4

Proportion of DVS and AVS graduates working full-time in a related field of study as at March 31 of the year following their graduation, by gender (%)



6.5 Labour Market Integration of College Graduates

The percentage of graduates of technical programs who were employed approximately 10 months after they obtained a Diploma of College Studies (DCS) was on the decline as of March 31, 2002. It went from 71.3% in 2001 to 70.3% in 2002.

The unemployment rate among graduates of college technical programs, which has been on the decline since 1996, rose slightly from 5.4% in 2001 to 6.0% in 2002. The unemployment rates observed since 1998 are lower than those for Québec's labour force as a whole.

According to the *Relance* survey of graduates from college technical education, the number of graduates, which had increased on a regular basis in previous years, fell by 4.3% in 2002, from 15 942 in 2001 to 15 260 in 2002. The number of jobs obtained by college technical program graduates decreased by 5.7%, from 11 370 to 10 729.

In 2002, 70.3% of graduates were employed, while 4.5% were looking for work, 23.1% were studying, and 2.1% were inactive. The percentage of college technical program graduates in the labour force (either working or looking for work) has declined, going from 75.4% in 2001 to 74.8% in 2002. The unemployment rate of college technical graduates rose by 11.1% during this period, from 5.4% in 2001 to 6.0% in 2002. The unemployment rate of graduates aged 24 or younger is slightly lower than that of all age groups taken together (5.6% compared with 6.0% in 2002). The proportion of graduates with a DCS from a technical program who were in this age group was 82.2% in 2000-2001.

The percentage of students who, after obtaining a DCS in technical education the previous year, were studying on March 31 of the year in question rose from 19.0% in 1998 to 23.1% in 2002. Most of these students, 81.5%, were in university, 13.1% were in technical education and 2.4% were in pre-university education. Of those in university on March 31, 2002, 89.6% were studying in a field related to the diploma earned in 2000-2001. Of those in technical education, 80.4% were also studying in a field related to the diploma earned in 2000-2001. Finally, 7.7% of those studying on March 31, 2002, were there because they were unable to find a job.

In 2002, 87.9% of graduates from a college technical program were employed full-time, a slight decrease from 2001, when it was 88.8%. This proportion had experienced a constant increase since 1994, when it stood at 71.2%. In 2002, men were more likely to be employed full-time (93.3%) than women (84.6%). The correspondence between the field of study and the field of employment has also fallen slightly: in 2002, 84.9% of full-time jobs (82.9% among men and

86.3% among women) were related to the field of study while, in 2001, the proportions were 85.3%, 84.8% and 85.7%, respectively. In 2002, 40.2% of part-time workers were employed part-time because they could not find a full-time job, compared with 44.2% observed in 2001.

Table 6.5

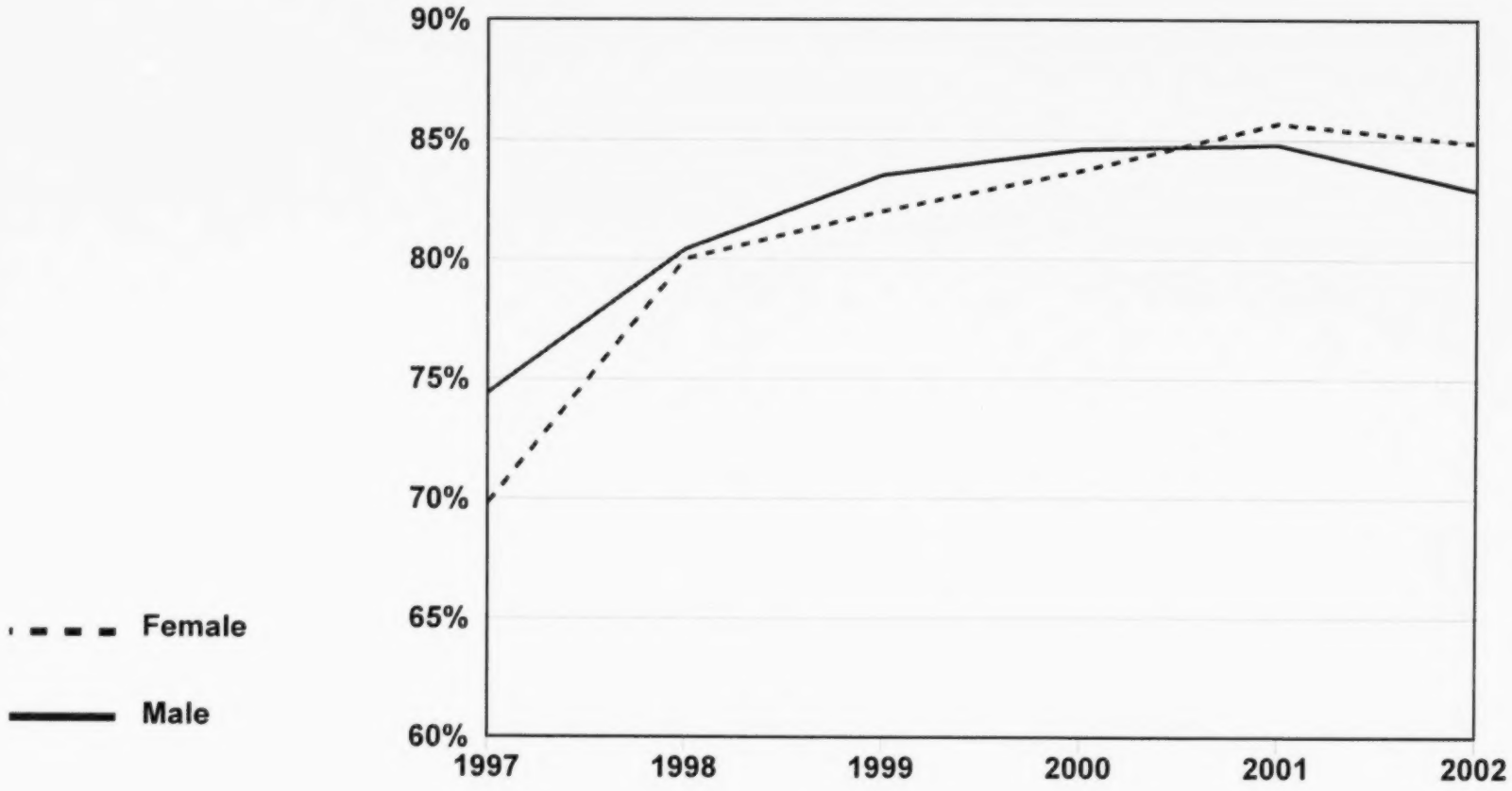
Employment situation of college graduates, by graduating class, as at March 31 of the year following their graduation (%)

	1998	1999	2000	2001	2002
Graduates with a DCS in a technical program					
Employed	71.6	73.2	74.1	71.3	70.3
Seeking employment	6.7	5.3	4.3	4.1	4.5
Studying	19.0	19.3	19.6	22.8	23.1
Inactive	2.7	2.2	2.0	1.8	2.1
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Unemployment rate	8.6	6.8	5.5	5.4	6.0
Graduates with a DCS in a pre-university program					
Employed	13.9	12.3	15.8	13.1	N/A
Seeking employment	2.0	1.1	0.7	1.5	N/A
Studying	81.6	85.2	82.8	84.1	N/A
Inactive	2.5	1.4	0.7	1.2	N/A
Total	**100.0**	**100.0**	**100.0**	**100.0**	**N/A**
Unemployment rate	12.5	8.1	4.5	10.5	N/A

N/A: Data for 2002 is unavailable, since the *Relance* survey of graduates from college pre-university education was not published that year.

Graph 6.5

Proportion of DCS graduates of technical programs working full-time in a related field of study as at March 31 of the year following their graduation, by gender (%)



6.6 Employers' Opinions of Graduates of Technical Education Programs

In 2002, the Ministère de l'Éducation surveyed employers who had hired at least one college technical education graduate between 1997 and 2002.

In 2002, 95.7% of employers considered their technical education recruits competent. In addition, 94.2% of them felt that a technical education diploma was important or very important as a hiring criterion.

Employers' overall evaluation of the competence of graduates was average or good in 95.7% of cases in 2002, while the corresponding percentages were 94.6% in 1997, 95% in 1994 and 90% in 1990.

After three months of work, 78.1% of employers claimed to be satisfied or very satisfied with the performance of graduates, compared with 78.6% in 1997. After one year, this percentage reached 94.3%, compared with 93.8% in the previous study.

The study demonstrated that 75.2% of employers prefer hiring technical education graduates for technical work. In addition, 10.1% of employers often or regularly hire individuals with less schooling, while 11.1% hire people with more schooling.

More than 80.0% of the employers surveyed believed that technical education provides graduates with distinct tools that give them an advantage over nongraduates and that prepare them to more effectively perform their tasks and more readily adapt to change: more theoretical knowledge, greater ease in specializing in their field and greater skills (dexterity). Also, 74.2% of the employers pointed out that graduates had better attitudes with respect to work and 72.5% believe that they are more creative and have more initiative.

Employers reported difficulty recruiting qualified personnel for the types of jobs associated with technical education. Indeed, 60.7% of employers said that there were not enough qualified applicants, and 47.1% even said that there were not enough applicants, qualified or not.

Five of the twelve suggested hiring criteria were considered important or very important by more than 85.0% of employers. The fact that these five criteria include "relevant field of study" and "applicant has obtained the required diploma" clearly illustrates how much employers recognize the value of job-related studies and their certification.

In order of importance, the 21 criteria (out of a possible 36) considered important by at least 75.0% of employers are: a thorough knowledge of basic techniques, the ability to work well in a team, a sense of responsibility, punctuality, honesty, resourcefulness, understanding of and compliance with instructions, the ability to adapt, productivity (precision, quality, speed), the ability to keep up to date in their daily work, good listening skills, the ability to plan and organize their work, motivation (words and actions), loyalty, the ability to work within deadlines, personal commitment to the company and the job, the ability to communicate orally in French, respect for authority, sound judgment, good manners and perseverance.

The evaluation of the work of recruits with respect to employers' expectations indicates potentially problematic situations for two items in the competency profile. In more than 20.0% of cases, these items fell short of employers' expectations, which were average or high: the ability to plan and organize their work (24.3%) and personal commitment to the company and the job (23.7%).

Other items that need improvement are:

1. knowledge of specialized techniques
2. language skills (English and French)
3. a number of proactive abilities and attitudes

Table 6.6a

Evaluation of level of competency of recruits (% of employers)

	1990[2]	1994[2]	1997	2002
Level of competency[1]				
High	39	51	52.2	51.3
Average	51	44	42.4	44.4
Low	9	5	4.7	3.7
Not indicated	1	0	0.7	0.6

Table 6.6b

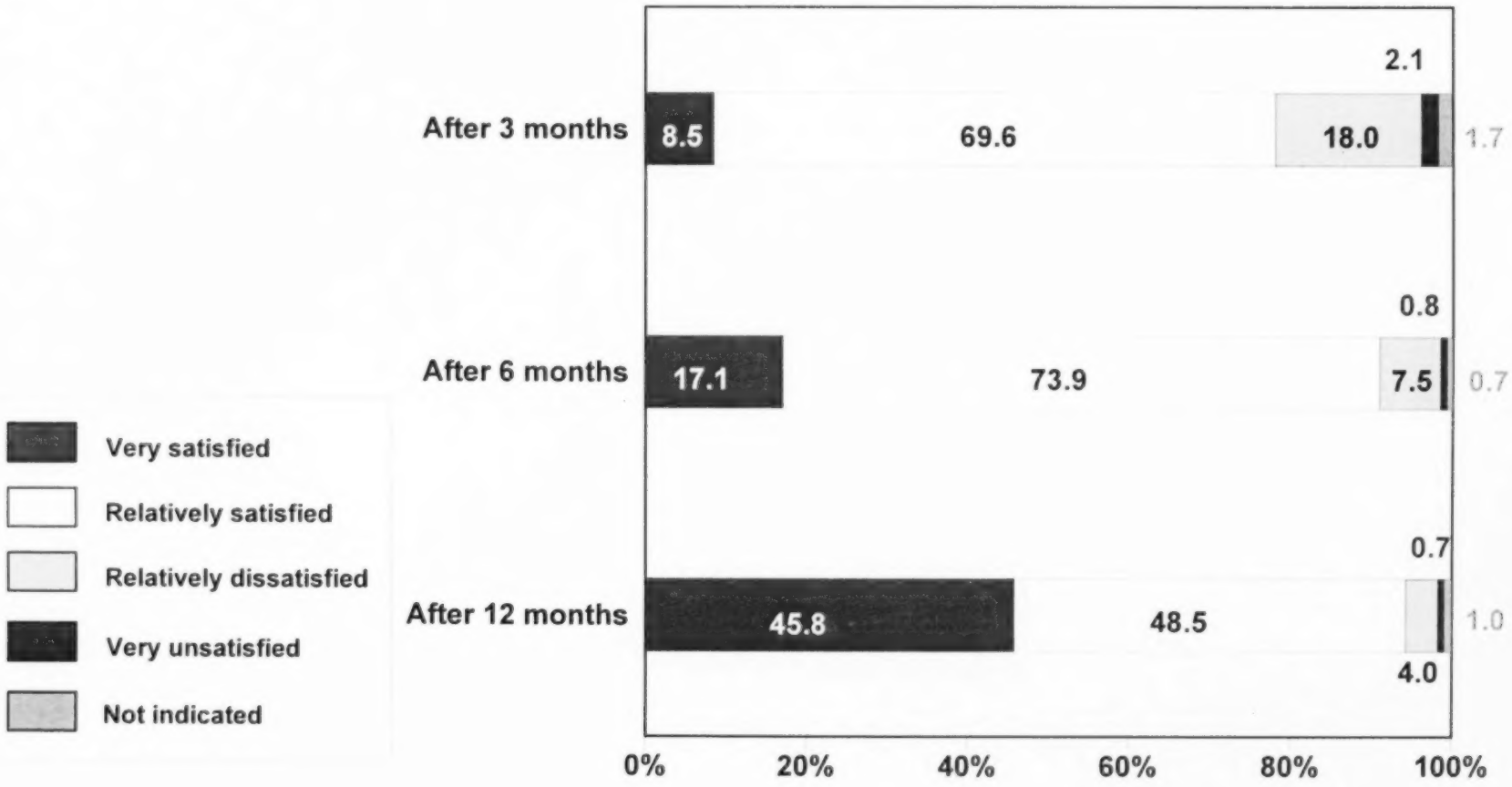
Employers' satisfaction with performance (% of employers)

	1990[2]	1994[2]	1997	2002
Satisfied or very satisfied[1]				
After 3 months	73	80	78.6	78.1
After 6 months	89	93	91.6	91.0
After 12 months	92	96	93.8	94.3

1. This data takes into account only those employers who answered the question.
2. These figures have been rounded off.

Graph 6.6

Employers' satisfaction with performance of technical education graduates, over different periods of time (survey conducted in 2002)



Statistical Appendix

Table 1
Full-time and part-time enrollment, by level of education and sector, 1992-1993 to 2001-2002

Table 2
Full-time and part-time enrollment, by category of institution, language of instruction, level of education and sector, 2001-2002

Table 3
Enrollment in secondary vocational education and college technical education, 1994-1995 to 2001-2002

Table 4
Personnel in school boards, CEGEPs and universities by job category, based on full-time equivalents, 1993-1994 to 2000-2001

Table 5
Number of diplomas awarded, by level of education and type of diploma, 1992 to 2001

Table 6
Schooling rates, by age, gender, level of education and attendance status, 2000-2001 (%)

Table 1

Full-time and part-time enrollment, by level of education and sector, 1992-1993 to 2001-2002

	1992-1993	1993-1994	1994-1995	1995-1996	1996-1997	1997-1998	1998-1999	1999-2000	2000-2001	2001-2002
Preschool (4-year-olds)	**8 002**	**8 151**	**14 023**	**17 284**	**17 294**	**16 295**	**15 908**	**15 174**	**14 601**	**15 778**
Preschool (5-year-olds)	**83 530**	**85 316**	**89 912**	**95 651**	**96 087**	**95 303**	**91 513**	**89 223**	**87 297**	**84 264**
Elementary education (youth sector)	**566 448**	**555 417**	**547 395**	**547 642**	**552 482**	**559 279**	**566 372**	**573 102**	**575 862**	**574 274**
Secondary education (youth sector)	**495 331**	**498 306**	**498 105**	**492 629**	**486 696**	**479 740**	**469 250**	**456 148**	**447 937**	**446 491**
Elementary and secondary education (adult sector)[1]	**223 651**	**222 531**	**223 886**	**226 317**	**222 434**	**218 193**	**214 701**	**219 268**	**222 714**	**238 507**
College[2]	**251 389**	**254 863**	**247 400**	**241 860**	**237 485**	**231 089**	**228 733**	**219 292**	**213 837**	**206 069**
Regular education	173 458	180 275	181 678	179 155	180 315	176 587	174 468	171 682	167 041	164 732
Adult education	77 931	74 588	65 722	62 705	57 170	54 502	54 265	47 610	46 796	41 337
University[3]	**256 426**	**253 344**	**244 531**	**237 810**	**230 941**	**226 977**	**226 638**	**231 897**	**233 463**	**240 592**
Undergraduate studies	214 856	210 759	201 418	194 196	187 565	183 370	183 157	187 014	187 514	190 749
Graduate studies	33 334	33 782	34 021	34 271	34 086	34 281	34 558	36 120	37 192	41 006
Postgraduate studies	8 236	8 803	9 092	9 343	9 290	9 326	8 923	8 763	8 757	8 837
Total	**1 884 777**	**1 877 928**	**1 865 252**	**1 859 193**	**1 843 419**	**1 826 876**	**1 813 115**	**1 804 104**	**1 795 711**	**1 806 335**

Sources: Déclaration des clientèles scolaires (DCS)
Déclaration des clientèles en formation professionnelle (DCFP)
Système d'information du Ministère sur les clientèles adultes (SIMCA)
Système d'information financière sur la clientèle adulte (SIFCA)
Système d'information et de gestion des données sur l'effectif collégial (SIGDEC)
Système de recensement des clientèles universitaires (RECU)
Gestion des données sur les effectifs universitaires (GDEU)

1. Only persons having taken courses for which credits are earned for certification purposes are included.
2. Fall term. Figures for adult education exclude students enrolled in noncredit programs.
3. Fall term. These figures include resident physicians and some students in college or Explorations programs. However, they exclude auditors, postdoctoral trainees and students from the Collège militaire Royal de Saint-Jean.

Table 2

Full-time and part-time enrollment, by category of institution, language of instruction, level of education and sector, 2001-2002

	Preschool		Elementary	Secondary	Elementary	College[2]		University[3]	Total
	4-year-olds	5-year-olds	(Youth sector)	(Youth sector)	and secondary (Adult sector[1])	Regular education	Adult education		
School boards	**15 526**	**80 006**	**543 546**	**370 197**	**234 558**				**1 24**
French	14 416	71 163	484 676	329 937	212 246				1 11
English	854	8 339	57 462	40 259	22 073				12
Native languages	256	504	1 408	1	239				
Private institutions	**46**	**4 362**	**28 995**	**74 964**	**3 349**	**13 742**	**8 717**		**13**
French	16	3 531	23 217	67 552	3 114	7 911	2 670		10
English	30	831	5 778	7 412	235	2 743	283		1
French and English						3 088	5 764		
Public institutions outside the jurisdiction of the Ministère de l'Education	**206**	**256**	**1 733**	**1 330**	**600**	**1 831**	**49**		
French	97	147	1 357	1 249	600	1 737	49		
English	18	22	142	78		94			
Native languages	91	87	234	3					
CEGEPs and campuses						**149 159**	**32 571**		**18**
French						126 387	27 903		15
English						22 772	4 668		
French and English									
Universities and branches								**240 592**	**24**
French								181 060	18
English								59 532	
Total	**15 778**	**84 624**	**574 274**	**446 491**	**238 507**	**164 732**	**41 337**	**240 592**	**1 80**
French	14 529	74 841	509 250	398 738	215 960	136 035	30 622	181 060	1 56
English	902	9 192	63 382	47 749	22 308	25 609	4 951	59 532	2
Native languages	347	591	1 642	4	239				
French and English						3 088	5 764		

Sources: Déclaration des clientèles scolaires (DCS)
Déclaration des clientèles en formation professionnelle (DCFP)
Système d'information du Ministère sur les clientèles adultes (SIMCA)
Système d'information financière sur la clientèle adulte (SIFCA)
Système d'information et de gestion des données sur l'effectif collégial (SIGDEC)
Gestion des données sur les effectifs universitaires (GDEU)

1. Only persons having taken courses for which credits are earned for certification purposes are included.
2. Fall term. Figures for adult education exclude students enrolled in noncredit programs.
3. Fall term. These figures include resident physicians, but exclude auditors, postdoctoral trainees and students in Explorations programs.

Table 3

Enrollment in secondary vocational education and college technical education, 1994-1995 to 2001-2002

	1994-1995	1995-1996	1996-1997	1997-1998	1998-1999	1999-2000	2000-2001	2001-2002p
SECONDARY EDUCATION[1]	**86 018**	**86 900**	**88 690**	**93 274**	**94 263**	**99 884**	**95 991**	**99 416**
Under 20 years of age[2]	19 655	22 376	25 751	26 923	26 476	26 031	25 514	25 407
20 years of age or over[3]	66 363	64 524	62 939	66 351	67 787	73 853	70 477	74 009
Regular paths: DVS (SSVD), SSVC, AVS, AVE	**59 771**	**66 950**	**72 990**	**75 786**	**77 127**	**75 890**	**76 559**	**79 819**
Under 20 years of age[2]	18 015	20 921	24 530	25 818	25 208	24 623	24 343	23 970
20 years of age or over[3]	41 756	46 029	48 460	49 968	51 919	51 267	52 216	55 849
Other programs	**26 247**	**19 950**	**15 700**	**17 488**	**17 136**	**23 994**	19 432	**19 597**
Under 20 years of age[2]	1 640	1 455	1 211	1 105	1 268	1 408	1 171	1 437
20 years of age or over[3]	24 607	18 495	14 479	16 383	15 868	22 586	18 261	18 160
COLLEGE	**116 181**	**121 000**	**122 178**	**123 857**	**126 104**	**121 845**	120 475	**116 374**
Diploma of College Studies (DCS-technical)	87 842	89 527	90 459	90 960	90 436	88 985	87 704	87 054
Certificat d'études collégiales (CEC)	8 516	7 320	1 207	274	60	14	-	-
Attestation of College Studies (ACS)	19 746	24 059	30 510	32 615	35 608	32 845	32 771	29 320
Diplôme de perfectionnement de l'enseignement collégial (DPEC)	77	94	2	8	-	1	-	-

Sources: Déclaration des clientèles scolaires (DCS)
Déclaration des clientèles en formation professionnelle (DCFP)
Système d'information du Ministère sur les clientèles adultes (SIMCA)
Système d'information financière sur la clientèle adulte (SIFCA)
Système d'information et de gestion des données sur l'effectif collégial (SIGDEC)

p. Preliminary figures
DVS: Diploma of Vocational Studies (or SSVD: Secondary School Vocational Diploma); SSVC: Secondary School Vocational Certificate; AVS: Attestation of Vocational Specialization; AVE: Attestation of Vocational Education
1. Only persons having taken courses for which credits are earned for certification purposes are included. Persons enrolled in more than one program in the same year are counted only once.
2. Includes students 20 years of age or over in the youth sector.
3. For the adult sector only.

Table 4

Personnel in school boards, CEGEPs and universities by job category, based on full-time equivalents,[1] 1993-1994 to 2000-2001

	1993-1994	1994-1995	1995-1996	1996-1997	1997-1998	1998-1999	1999-2000	2000-2001
School boards	**107 487**	**106 934**	**105 919**	**104 380**	**104 462**	**106 630**	**108 755**	**111 221**
Youth and adult sectors								
Teaching staff	71 170	70 518	70 331	69 680	70 366	71 152	71 288	71 772
Administrative staff	1 479	1 452	1 388	1 274	1 159	1 118	1 219	1 275
School principals	3 804	3 820	3 753	3 647	3 528	3 567	3 508	3 492
Managerial staff	859	848	802	751	671	663	684	677
Nonteaching professionals	4 803	4 691	4 530	4 250	3 898	3 897	4 007	4 209
Support staff	25 372	25 605	25 115	24 778	24 840	26 233	28 049	29 796
CEGEPs	**21 304**	**21 771**	**21 245**	**20 472**	**19 570**	**19 692**	**19 869**	**20 491**
Regular education and adult education								
Teaching staff	13 405	13 919	13 652	13 224	12 699	12 892	12 950	13 381
Administrative staff	667	670	664	612	583	595	622	651
Managerial staff	335	327	307	287	245	230	232	233
Nonteaching professionals	1 127	1 146	1 085	1 047	964	964	1 017	1 086
Support staff	5 770	5 709	5 537	5 302	5 079	5 011	5 048	5 140
Universities[2]	**33 404**	**33 054**	**32 224**	**31 615**	**N/A**	**N/A**	**N/A**	**N/A**
Teaching and research staff	11 260	11 038	10 826	10 553	N/A	N/A	N/A	N/A
Teaching and research assistants	4 083	4 304	4 299	4 652	N/A	N/A	N/A	N/A
Executive personnel	1 348	1 305	1 291	1 218	N/A	N/A	N/A	N/A
Managerial staff	603	647	491	498	N/A	N/A	N/A	N/A
Nonteaching professionals	3 557	3 496	3 487	3 352	N/A	N/A	N/A	N/A
Support staff	12 553	12 264	11 830	11 342	N/A	N/A	N/A	N/A

Sources: Personnel des commissions scolaires (PERCOS II)
Système d'information sur le personnel des organismes collégiaux (SPOC-RFA)
Système d'information financière des universités (SIFU)

N/A: Data not available

1. All personnel activities carried out during the school year are included in the calculation of full-time equivalents for each job category.
2. Funds with or without restrictions. Excludes courses given by lecturers, those given in addition to regular course loads by regular professors and those given by individuals receiving honoraria or on contract.

Table 5

Number of diplomas awarded, by level of education and type of diploma, 1992 to 2001

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Secondary[1]	**101 503**	**110 431**	**103 211**	**104 521**	**111 762**	**109 199**	**107 050**	**107 412**	**105 228**	**101 068**
General education	78 893	79 418	81 176	81 791	86 451	80 289	77 315	76 866	73 363	71 465
Vocational education	22 610	31 013	22 035	22 730	25 311	28 910	29 735	30 546	31 865	29 603
College	**43 316**	**44 716**	**44 749**	**43 135**	**40 956**	**42 676**	**41 877**	**42 090**	**40 710**	**39 294**
DCS (pre-university education)	25 424	24 991	25 857	25 514	24 392	25 901	25 110	24 569	23 317	20 073
DCS (technical education)	13 516	14 764	15 017	15 602	16 136	16 694	16 747	17 508	17 391	16 747
DCS without mention	1 233	1 542	753	335	149	7	1			
CEC and DPEC[2]	3 143	3 419	3 122	1 684	279	74	19	13	2	2 474
University[3]	**53 822**	**55 277**	**56 817**	**56 015**	**55 184**	**53 277**	**50 781**	**50 726**	**50 563**	**51 185**
Bachelor's degree	27 683	28 404	28 967	28 932	29 602	28 894	27 478	28 284	27 822	27 970
Master's degree	5 823	6 082	6 604	6 414	6 547	6 514	6 727	6 814	7 468	7 692
Doctorate	915	891	959	1 037	1 087	1 143	1 231	1 170	1 165	1 094
Certificates and diplomas	19 401	19 900	20 287	19 632	17 948	16 726	15 345	14 458	14 108	14 429

Sources: Système de sanction des études appliquée au ministère de l'Éducation (SESAME)
Sanction des adultes en formation générale (SAGE)
Système de la sanction des études au collégial (SSEC)
Système de recensement des clientèles universitaires (RECU)
Gestion des données sur les effectifs universitaires (GDEU)

DCS: Diploma of College Studies; CEC: certificat d'études collégiales (certificate of college studies);
DPEC: diplôme de perfectionnement de l'enseignement collégial (diploma of advanced college studies)

1. From 1989-1990 to 1998-1999. Following the vocational education reform, approximately 8 800 students with an SSVC (Secondary School Vocational Certificate) also received an SSVD (Secondary School Vocational Diploma) in 1993.
2. Since 1994, there have been no new enrollments in programs leading to these types of certification. ACSs (Attestations of College Studies) are counted starting in 2001.
3. These figures exclude diplomas awarded by the Collège militaire Royal de Saint-Jean.

Table 6

Schooling rates,[1] by age, gender, level of education and attendance status, 2000-2001 (%)

	Preschool and Elementary Education	Secondary		College		University		Total		
		Full-time	Part-time	Full-time	Part-time	Full-time	Part-time	Full-time	Part-time	All attendance statuses
4-year-olds										
Male	17.7	0.0	0.0	0.0	0.0	0.0	0.0	17.7	0.0	17.7
Female	17.7	0.0	0.0	0.0	0.0	0.0	0.0	17.7	0.0	17.7
Total	17.7	0.0	0.0	0.0	0.0	0.0	0.0	17.7	0.0	17.7
5-year-olds										
Male	97.0	0.0	0.0	0.0	0.0	0.0	0.0	97.0	0.0	97.0
Female	97.4	0.0	0.0	0.0	0.0	0.0	0.0	97.4	0.0	97.4
Total	97.2	0.0	0.0	0.0	0.0	0.0	0.0	97.2	0.0	97.2
15-year-olds										
Male	0.0	96.3	0.2	0.1	0.0	0.0	0.0	96.4	0.2	96.5
Female	0.0	97.2	0.1	0.1	0.0	0.0	0.0	97.3	0.1	97.4
Total	0.0	96.7	0.1	0.1	0.0	0.0	0.0	96.8	0.1	97.0
16-year-olds										
Male	0.6	90.9	2.5	1.7	0.0	0.0	0.0	93.2	2.5	95.7
Female	0.2	92.2	2.2	2.9	0.0	0.0	0.0	95.3	2.2	97.5
Total	0.4	91.5	2.4	2.3	0.0	0.0	0.0	94.2	2.4	96.6
17-year-olds										
Male	0.8	39.4	11.0	32.1	0.1	0.4	0.0	72.7	11.2	83.8
Female	0.4	29.4	9.3	48.1	0.1	0.5	0.0	78.4	9.4	87.8
Total	0.6	34.5	10.2	39.9	0.1	0.5	0.0	75.5	10.3	85.8
18-year-olds										
Male	0.8	23.2	10.5	35.8	0.4	2.2	0.1	62.0	11.0	73.0
Female	0.5	16.8	8.2	52.2	0.3	3.6	0.1	73.1	8.6	81.7
Total	0.6	20.1	9.4	43.8	0.3	2.8	0.1	67.4	9.8	77.2
19-year-olds										
Male	0.6	16.7	8.0	26.4	1.2	9.5	0.3	53.2	9.5	62.8
Female	0.3	11.7	5.7	34.2	1.5	18.1	0.4	64.3	7.7	71.9
Total	0.5	14.2	6.9	30.2	1.3	13.7	0.4	58.6	8.6	67.2

1. Schooling rates are calculated by dividing the school population of a given age on September 30, 2000, by the population of the same age on the same date. The rates for 4-year-olds and 5-year-olds differ from the results published in Section 2.2 (see notes in Section 2.2).

Table 6 (cont.)

Schooling rates,[1] by age, gender, level of education and attendance status, 2000-2001 (%)

	Preschool and Elementary Education	Secondary		College		University		Total		
		Full-time	Part-time	Full-time	Part-time	Full-time	Part-time	Full-time	Part-time	All attendance statuses
20-to-24-year-olds										
Male	0.4	7.4	4.6	8.3	1.1	13.6	3.0	29.7	8.6	38.3
Female	0.3	5.5	3.2	9.3	1.4	20.3	4.5	35.3	9.1	44.3
Total	0.3	6.5	3.9	8.7	1.2	16.8	3.7	32.4	8.8	41.2
25-to-29-year-olds										
Male	0.4	2.9	2.7	1.7	0.4	4.2	3.5	9.2	6.7	15.8
Female	0.4	2.5	2.0	2.1	0.7	4.4	5.2	9.3	8.0	17.3
Total	0.4	2.7	2.4	1.9	0.6	4.3	4.3	9.2	7.3	16.5
30-to-39-year-olds										
Male	0.3	1.4	1.9	0.6	0.3	1.0	1.9	3.4	4.1	7.4
Female	0.4	1.6	1.4	0.9	0.6	1.0	2.8	3.8	4.9	8.7
Total	0.4	1.5	1.7	0.7	0.4	1.0	2.4	3.6	4.5	8.1
40-to-49-year-olds										
Male	0.2	0.7	1.2	0.2	0.2	0.3	1.2	1.4	2.6	4.0
Female	0.2	0.9	1.0	0.4	0.5	0.3	2.1	1.9	3.5	5.4
Total	0.2	0.8	1.1	0.3	0.3	0.3	1.6	1.6	3.1	4.7
50-to-59-year-olds										
Male	0.1	0.3	0.5	0.1	0.1	0.1	0.4	0.5	1.0	1.5
Female	0.2	0.3	0.4	0.1	0.2	0.1	0.7	0.6	1.3	1.9
Total	0.1	0.3	0.5	0.1	0.1	0.1	0.6	0.6	1.2	1.7
60 years of age or over										
Male	0.1	0.0	0.2	0.0	0.0	0.0	0.1	0.1	0.2	0.4
Female	0.1	0.0	0.2	0.0	0.0	0.0	0.1	0.2	0.3	0.5
Total	0.1	0.0	0.2	0.0	0.0	0.0	0.1	0.2	0.3	0.4